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LOGINID:ssspta1626amd

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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	4	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	5	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	6	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	7	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	8	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
NEWS	9	AUG 18	Simultaneous left and right truncation added to ANABSTR
NEWS	10	SEP 22	DIPPR file reloaded
NEWS	11	SEP 25	INPADOC: Legal Status data to be reloaded
NEWS	12	SEP 29	DISSABS now available on STN
NEWS	13	OCT 10	PCTFULL: Two new display fields added
NEWS	14	OCT 21	BIOSIS file reloaded and enhanced
NEWS	15	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS	16	NOV 24	MSDS-CCOHS file reloaded
NEWS EXPRESS			NOVEMBER 14 CURRENT WINDOWS VERSION IS V6.01c, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items
NEWS PHONE			Direct Dial and Telecommunication Network Access to STN
NEWS WWW			CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:38:18 ON 08 DEC 2003

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND

command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:38:29 ON 08 DEC 2003  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 DEC 2003 HIGHEST RN 624286-37-9  
DICTIONARY FILE UPDATES: 5 DEC 2003 HIGHEST RN 624286-37-9

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading 09877259b.str

L1 STRUCTURE UPLOADED

=>

Uploading 09877259a.str

L2 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

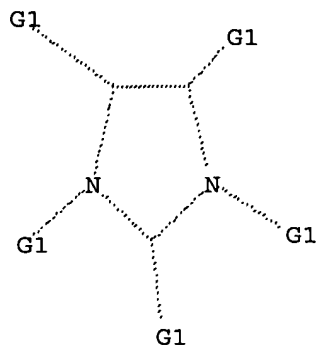
P / F

Structure attributes must be viewed using STN Express query preparation.

=> d l2

L2 HAS NO ANSWERS

L2 STR



G1 H,X,Ak,Ph

Structure attributes must be viewed using STN Express query preparation.

=> s l1 and l2

SAMPLE SEARCH INITIATED 11:39:00 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 129 TO ITERATE

100.0% PROCESSED 129 ITERATIONS  
SEARCH TIME: 00.00.01

19 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1899 TO 3261  
PROJECTED ANSWERS: 119 TO 641

L3 19 SEA SSS SAM L1 AND L2

=> s l1 and l2 ful

FULL SEARCH INITIATED 11:39:05 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 2507 TO ITERATE

100.0% PROCESSED 2507 ITERATIONS  
SEARCH TIME: 00.00.01

262 ANSWERS

L4 262 SEA SSS FUL L1 AND L2

=> s l4 and caplus/lc

32125809 CAPLUS/LC

L5 260 L4 AND CAPLUS/LC

=> s l4 not l5

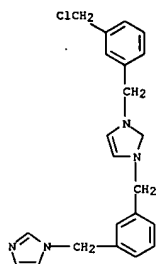
L6 2 L4 NOT L5

=> d 1-2

L6 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 478855-97-9 REGISTRY  
 CN 1H-imidazolium, 1-[[3-(chloromethyl)phenyl]methyl]-3-[[3-[(1H-imidazol-1-ylmethyl)phenyl]methyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 MF C22 H22 Cl N4 . F6 P  
 CI COM  
 SR CA

CM 1

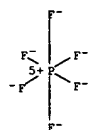
CRN 478855-96-8  
 CMF C22 H22 Cl N4



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

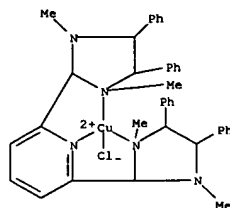
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L6 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 195725-95-2 REGISTRY  
 CN Copper(1+), [2,6-bis(1,3-dimethyl-4,5-diphenyl-2-imidazolidinyl-.kappa.N1)pyridine-.kappa.N]chloro-, {SP-4-3-[1S-[1.alpha.,2.alpha.(1R\*,2S\*,4S\*,5S\*)],4.alpha.,5.beta.]]]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 MF C39 H41 Cl Cu N5 . F6 P  
 CI COM  
 SR CA

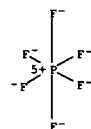
CM 1

CRN 195725-94-1  
 CMF C39 H41 Cl Cu N5  
 CCI CCS



CM 2

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



=> s 1/nr  
L7 2988347 1/NR

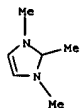
=> s l1 and l2 subset=l7 ful  
FULL SUBSET SEARCH INITIATED 11:40:07 FILE 'REGISTRY'  
FULL SUBSET SCREEN SEARCH COMPLETED - 177 TO ITERATE

100.0% PROCESSED 177 ITERATIONS 157 ANSWERS  
SEARCH TIME: 00.00.01

L8 157 SEA SUB=L7 SSS FUL L1 AND L2

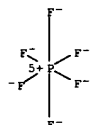
=> d 1

L8 ANSWER 1 OF 157 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 620944-22-1 REGISTRY  
 CN 1H-Imidazolium, 1,2,3-trimethyl-, hexafluorophosphate(1-) (9CI) (CA  
 INDEX  
 NAME)  
 MF C6 H11 N2 . F6 P  
 SR CA  
 LC STN Files: CA, CAPLUS  
 CM 1  
 CRN 65086-10-4  
 CMF C6 H11 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s l8 and caplus/lc  
32125809 CAPLUS/LC  
L9 157 L8 AND CAPLUS/LC

	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	314.40	314.61

FILE 'CAPLUS' ENTERED AT 11:40:24 ON 08 DEC 2003  
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FILE COVERS 1907 - 8 Dec 2003 VOL 139 ISS 24  
FILE LAST UPDATED: 7 Dec 2003 (20031207/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l8  
L10 583 L8

	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.83	315.44

FILE 'STNGUIDE' ENTERED AT 11:41:30 ON 08 DEC 2003  
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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Dec 5, 2003 (20031205/UP).

	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.12	315.56

FILE 'CAPLUS' ENTERED AT 11:42:40 ON 08 DEC 2003  
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FILE COVERS 1907 - 8 Dec 2003 VOL 139 ISS 24  
FILE LAST UPDATED: 7 Dec 2003 (20031207/ED)

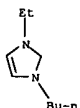
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l10 and py<2000  
19720964 PY<2000  
L11 82 L10 AND PY<2000  
=> d 1-82 ibib abs hitstr

L11 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2000:122047 CAPLUS  
DOCUMENT NUMBER: 132:139082  
TITLE: Preparation of molten salts  
INVENTOR(S): Bourbigou Olivier, Helene; Favre, Frederic  
PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.  
SOURCE: Fr. Demande, 10 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2779143	A1	19991203	FR 1998-6790	19980529 <--
FR 2779143	B1	20011012		
NL 1012169	C2	19991130	NL 1999-1012169	19990527 <--
GB 2337754	A1	19991201	GB 1999-12633	19990528 <--
GB 2337754	B2	20031126		
US 6245918	B1	20010612	US 1999-322924	19990601

PRIORITY APPLN. INFO.: MARPAT 132:139082  
OTHER SOURCE(S):  
AB An ionic compd. Q+A- (Q+ = amine residue; A- = tetrafluoroborate, hexafluorophosphate, hexafluoroantimonate, hexafluoroarsenate, tetrachloroaluminate) which is liq. below 150 degree. (preferably below 50 degree.) is produced by reaction of an trialkyloxonium compd. with an amine in a solvent. The resulting compd. is suitable as a solvent for catalytic reactions.  
IT 256647-89-99  
RL: PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PREP (Preparation); PROC (Process) (prepn. of)  
RN 256647-89-9 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-ethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 145022-47-5  
CMF C9 H17 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:764040 CAPLUS  
DOCUMENT NUMBER: 132:12436  
TITLE: Processes for synthesizing halopyridylazacyclopentane derivatives and intermediates thereof  
INVENTOR(S): Node, Manabu; Nakamura, Daisaku; Fujiwara, Toshio; Ichihashi, Shogo  
PATENT ASSIGNEE(S): Nihon Medi-Physics Co., Ltd., Japan  
SOURCE: PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

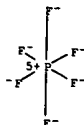
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9961443	A1	19991202	WO 1998-JP3954	19980903 <--
W: CA, JP, KR, US				
US 2002010339	A1	20020124	US 2000-462379	20000107
US 6384228	B2	20020507		

PRIORITY APPLN. INFO.: JP 1998-143639 A 19980526  
WO 1998-JP3954 W 19980903  
OTHER SOURCE(S): CASREACT 132:12436; MARPAT 132:12436  
AB The title process involves 3 steps; step 1 comprises treatment of optically active esters of alcs. with acetone-1,3-dicarboxylic acid with a dehydrating agent in the presence of a base and sepn. of the resulting diastereomers of the corresponding allene-1,3-dicarboxylic acid esters; step 2 comprises Diels-Alder reaction of the obtained optically active allene-1,3-dicarboxylic acid esters with a dienophile and redn. of the resulting 7-azabicyclo[2.2.1]heptene derivs.; and step 3 comprises conversion of the obtained 7-azabicyclo[2.2.1]heptane derivs. to optically active halopyridylazacyclopentanes. Thus, di-(1R,2S,5R)-menthyl acetone-1,3-dicarboxylate (also prepd.) was treated with 2-chloro-1,3-dimethylimidazolium chloride in CH2Cl2 contg. Et3N to give a mixt. of (3R)- and (3S)-di-(1R,2S,5R)-menthyl 2,3-pentadiene-1,5-dicarboxylate, which were sepd. by fractional crystn.; the (R) diastereomer thus obtained underwent Diels-Alder reaction with N-(tert-butoxycarbonyl)pyrrole to give (1R,2S,5R)-menthyl

(3Z)-3-(1R,2S,5R)-menthyloxycarbonylmethylidene-7-azabicyclo[2.2.1]hept-5-ene-2-carboxylate, which was reduced with 10% Pd/C to give the corresponding azabicyclo[2.2.1]heptane-2-carboxylate, which was oxidized with O3 to give a mixt. of the exo and endo isomers of the 3-oxo-7-azabicyclo[2.2.1]heptane-2-carboxylate, which was treated with HCl to give (1R,4S)-7-(tert-butoxycarbonyl)-7-azabicyclo[2.2.1]heptan-2-one. This azabicyclo[2.2.1]heptan-2-one deriv. may be converted into the title 2-(halopyridinyl) derivs. but no examples or further details of this transformation are reported.

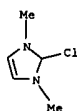
IT 176088-03-2, 2-Chloro-1,3-dimethylimidazolium hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of halopyridylazacyclopentane derivs. via azabicycloheptanones)  
RN 176088-03-2 CAPLUS  
CN 1H-Imidazolium, 2-chloro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA

L11 ANSWER 1 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



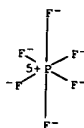
L11 ANSWER 2 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CM 1  
CRN 56741-83-4  
CMF C5 H8 Cl N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

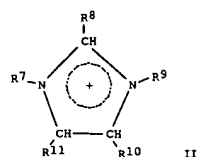
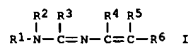
FORMAT

L11 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:756820 CAPLUS  
 DOCUMENT NUMBER: 131:353711  
 TITLE: Fire-resistant nonaqueous electrolyte solutions and secondary batteries thereof  
 INVENTOR(S): Nakano, Tomoji; Ota, Yoshihisa  
 PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11329495	A2	19991130	JP 1998-354453	19981214 <--
JP 3060107	B2	20000710		

PRIORITY APPLN. INFO.: JP 1998-31991 A 19980128  
 JP 1998-80174 A 19980311

OTHER SOURCE(S): MARPAT 131:353711  
 GI



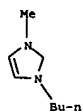
AB The electrolyte solns. contain an electrolyte, a nonaq. solvent, and an asym. N contg. quaternary salt having conjugated double bond system. The salt may be a compd. contg. N,N,N'-substituted amidine group I (R1, R2 = Cl-10 hydrocarbon group contg. amino, nitro, cyano, carbonyl, or ether group; R3-6 = H, Cl-10 hydrocarbon group contg. amino, nitro, cyano, carbonyl, or ether group; and .gtoreq.2 of R1-6 may form a ring) or II (R7 and R9 = Cl-4 alkyl, Ph, or benzyl group; R8 = Cl-4 alkyl, Ph, or benzyl group and may be the same as R7 and R9; R10 and R11 = H or Cl-4 alkyl group). The anion of the salt may be BF4-, PF6- R12SO2(R13SO2)N- (R12 and R13 = ether group contg. Cl-4 perfluoroalkyl group), or

L11 ANSWER 4 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:592248 CAPLUS  
 DOCUMENT NUMBER: 131:324077  
 TITLE: New Method to Recycle Homogeneous Catalysts from Monophasic Reaction Mixtures by Using an Ionic Liquid Exemplified for the Rh-Catalyzed Hydroformylation of Methyl-3-pentenoate  
 AUTHOR(S): Keim, Wilhelm; Vogt, Dieter; Waffenschmidt, Horst; Wasserscheid, Peter  
 CORPORATE SOURCE: Institut für Technische Chemie und Makromolekulare, Chemie der RWTH-Aachen, Aachen, 52056, Germany  
 SOURCE: Journal of Catalysis (1999), 186(2), 481-484  
 CODEN: JCTLA5; ISSN: 0021-9517  
 PUBLISHER: Academic Press  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Recovery of catalysts in the Rh-catalyzed hydroformylation of methyl-3-pentenoate (M3P) was realized through the use of ionic liqs. as solvents, e.g., 1-butyl-3-methylimidazolium hexafluorophosphate [BMIM PF6] and ligands, e.g., PPh3 and 2,2'-bis((2,2'-bis(4-methoxy-6-tert-butyl)phenoxy)phosphino)-oxy)-1,1'-binaphthyl (I). The solvent is effective for homogeneous catalysis even in cases where the reaction mixt. is monophasic; almost complete retention of regioselectivity and significant enhancement of catalyst lifetime and overall productivity are attained. Catalyst recycling is achieved by reactive distn. where BMIM PF6 acts as stabilizer. The hydroformylation of M3P was carried out using Rh(acac)(CO)2 in the presence of ligand I and BMIM PF6, followed by catalyst recycling. The regioselectivity, i.e., n-hydroformylated vs. iso-hydroformylated products, is ligand controlled. (c) 1999 Academic Press.

IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 RL: CAT (Catalyst use): NUU (Other use, unclassified): USES (Uses)  
 (solvent: recycling homogeneous catalysts by use of butylmethylimidazolium fluorophosphate ionic solvent in Rh-catalyzed hydroformylation of Me pentenoate)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2

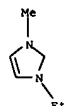


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CM 2

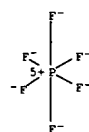
L11 ANSWER 3 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 R14SO2(R15SO2)(R16SO2)C- (R14-16 = ether group contg. Cl-4 perfluoroalkyl group). The electrolyte is Li salt contg. the above mentioned anions.  
 IT 155371-19-0, 1-Methyl-3-ethylimidazolium hexafluorophosphate  
 RL: MGA (Modifier or additive use): USES (Uses)  
 (compn. of fire-resistant nonaq. electrolyte solns. for secondary lithium batteries)  
 RN 155371-19-0 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1  
 CRN 65039-03-4  
 CMF C6 H11 N2

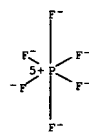


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CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 4 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L11 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:583950 CAPLUS  
DOCUMENT NUMBER: 131:327888  
TITLE: First Observation of Molecular Composition and Orientation at the Surface of a Room-Temperature

Ionic

Author(s): Liquid  
Gannon, Thomas J.; Law, George; Watson, Philip R.; Carmichael, Adrian J.; Seddon, Kenneth R.  
CORPORATE SOURCE: Department of Chemistry, Oregon State University, Corvallis, OR, 97331, USA

SOURCE: Langmuir (1999), 15(24), 8429-8434  
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The first measurements of the compn. and mol. orientation at the surface of a room-temp. ionic liq., 1-butyl-3-methylimidazolium hexafluorophosphate, [bmim][PF<sub>6</sub>] are reported. Recoil spectrometry using rare gas ions on continuously refreshed liq. surfaces in vacuo shows that neither ion is significantly enriched in the surface. The av.

orientation of the cation is with the plane of the ring vertical. The cation ring is rotated about an axis through its center such that the nitrogen atoms and side chains are deeper in the surface with the surface normal passing between the two nitrogen atoms (with an estd. error of  $\pm 30^\circ$ ).

IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
RI: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(observation of mol. compn. and orientation at the surface of a room-temp. ionic liq.)

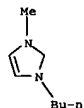
RN 174501-64-5 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 80432-08-2

CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

L11 ANSWER 6 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:529892 CAPLUS

DOCUMENT NUMBER: 131:199656

TITLE: 2-Chloro-1,3-dimethylimidazolium Chloride. 2. Its Application to the Construction of Heterocycles through Dehydration Reactions

Author(s): Isobe, Toshio; Ishikawa, Tutomu  
CORPORATE SOURCE: Central Research Laboratory, Shitoro Pharmaceutical Co. Ltd., Narashino Chiba, 275-0016, Japan

SOURCE: Journal of Organic Chemistry (1999), 64(19), 6989-6992

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 2-Chloro-1,3-dimethylimidazolium chloride (DMC) can act as a powerful dehydrating equiv. to DCC under nearly neutral conditions. Its application to the construction of heterocycles through dehydration reactions is described.

IT 242130-50-3

RI: CAT (Catalyst use); USES (Uses)  
(dehydration reactions promoted by chlorodimethylimidazolium chloride in prepn. of heterocycles)

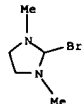
RN 242130-50-3 CAPLUS

CN 1H-Imidazolium, 2-bromo-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 242130-49-0

CMF C5 H10 Br N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

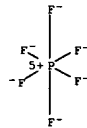
L11 ANSWER 5 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L11 ANSWER 6 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L11 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:511100 CAPLUS  
 DOCUMENT NUMBER: 131:150673  
 TITLE: Novel materials useful as electrolytic solutes  
 INVENTOR(S): Michot, Christophe; Armand, Michel; Gauthier, Michel;  
 Ravet, Nathalie  
 PATENT ASSIGNEE(S): Acep Inc., Can.; Centre National de la Recherche  
 Scientifique; Universite de Montreal  
 SOURCE: PCT Int. Appl., 43 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940025	A1	19990812	WO 1999-CA87	19990203 <--
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 971854	A1	20000119	EP 1999-903554	19990203
R: DE, FR, GB, IT				
JP 2001527505	T2	20011225	JP 1999-539801	19990203
US 6365301	B1	20020402	US 1999-390642	19990907
US 2002055045	A1	20020509	US 2001-986681	20011109

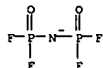
PRIORITY APPLN. INFO.:  
 CA 1998-2228801 A 19980203  
 CA 1998-2256945 A 19981218  
 WO 1999-CA87 W 19990203  
 US 1999-390642 A1 19990907

AB The invention concerns novel ionic compds. with low m.p. whereof the onium type cation having at least a heteroatom such as N, O, S or P bearing the pos. charge and whereof the anion includes, wholly or partially, at least an ion imide such as (FXIO)N-(OX2F) wherein X1 and X2 are identical or different and comprise SO or PF, and their use as solvent in electrochem. devices. Said compn. comprises a salt wherein the anionic charge is delocalized, and can be used, inter alia, as electrolyte.

IT 235789-76-1  
 RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)  
 (material useful as electrolytic solutes)  
 RN 235789-76-1 CAPLUS  
 CN 1H-imidazolium, 1-ethyl-3-methyl-, salt with imidodiphosphoryl fluoride (1:1) (9CI) (CA INDEX NAME)

CH 1

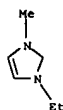
CRN 165688-14-2  
 CMF F4 N O2 P2



CH 2

L11 ANSWER 7 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CRN 65039-03-4  
 CMF C6 H11 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*  
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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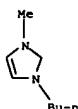
L11 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:474358 CAPLUS  
 DOCUMENT NUMBER: 131:164727  
 TITLE: Examination of Ionic Liquids and Their Interaction with Molecules, When Used as Stationary Phases in Gas Chromatography  
 AUTHOR(S): Armstrong, Daniel W.; He, Lingfeng; Liu, Yan-Song  
 CORPORATE SOURCE: Department of Chemistry, University of Missouri-Rolla,  
 SOURCE: Rolla, MO, 65409, USA  
 Analytical Chemistry (1999), 71(17), 3873-3876  
 CODEN: ANCHAM; ISSN: 0003-2700  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Stable room-temp. ionic liqs. (RTILs) were used as novel reaction solvents. They can solubilize complex polar mol. such as cyclodextrins and glycopeptides. Their wetting ability and viscosity allow them to be coated onto fused silica capillaries. Thus, 1-butyl-3-methylimidazolium hexafluorophosphate and the analogous chloride salt can be used as stationary phases for gas chromatog. (GC). Using inverse GC, one can examine the nature of these ionic liqs. via their interactions with a variety of compds. The Rohrschneider-McReynolds consts. were detd. for both ionic liqs. and a popular com. polysiloxane stationary phase. Ionic liq. stationary phases seem to have a dual nature. They appear to act as a low-polarity stationary phase to nonpolar compds. However, mol. with strong proton donor groups, in particular, are tenaciously retained. The nature of the anion can have a significant effect on both the solubilizing ability and the selectivity of ionic liq. stationary phases. Apparently the unusual properties of ionic liqs. could make them beneficial in many areas of sepn. science.

IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 RL: ARU (Analytical role, unclassified); PRP (Properties); ANST (Analytical study)  
 (org. compds. retention in gas chromatog. using ionic liqs. as stationary phases)  
 RN 174501-64-5 CAPLUS  
 CN 1H-imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CH 1

CRN 80432-08-2  
 CMF C8 H15 N2

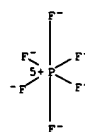


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CH 2

L11 ANSWER 8 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



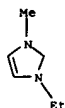
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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L11 ANSWER 9 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:468531 CAPLUS  
DOCUMENT NUMBER: 131:90277  
TITLE: Asymmetric organic alkyl methyl carbonates for nonaqueous power sources  
INVENTOR(S): Ein-Elil, Yair; Laura, Richard  
PATENT ASSIGNEE(S): Covalent Associates, Inc., USA  
SOURCE: PCT Int. Appl., 33 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9934472	A1	19990708	WO 1998-US27642	19981229 <--
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5994000	A	19991130	US 1997-1450	19971231 <--
EP 1042840	A1	20001011	EP 1998-964307	19981229
R: DE				
JP 2002500423	T2	20020108	JP 2000-526994	19981229
PRIORITY APPLN. INFO.: US 1997-1450 A 19971231				
WO 1998-US27642 W 19981229				
OTHER SOURCE(S): MARPAT 131:90277				
AB Acyclic, asym. Me alkyl carbonates, particularly for use with a carbonaceous anode such as graphite, in electrolytes suitable for portable power sources, are disclosed. Asym. alkyl carbonate solvents, having the general structure of MeO-CO2-R, where R is larger than Me, can be used as the only solvent in the nonaq. electrolyte of a portable power source; no other solvent is necessary for superior performance in high energy d. lithium ion batteries or high power electrochem. capacitors.				
Furthermore, an asym. alkyl Me carbonate can serve as the primary solvent for a nonaq. electrolyte, with the appropriate vol. balance being made up with a combination of cyclic and acyclic carbonates or esters chosen for a particular application.				
IT	155371-19-0, 1-Ethyl-3-methylimidazolium hexafluorophosphate			
RI: DEV (Device component use); USES (Uses)				
(asym. org. alkyl Me carbonates for nonaq. power sources)				
RN	155371-19-0 CAPLUS			
CN	1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)			
CM	1			
CRN	65039-03-4			
CMF	C6 H11 N2			

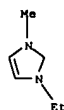
L11 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:464143 CAPLUS  
DOCUMENT NUMBER: 131:90263  
TITLE: Asymmetric organic alkyl ethyl carbonates for nonaqueous power sources  
INVENTOR(S): Ein-Elil, Yair; Laura, Richard  
PATENT ASSIGNEE(S): Covalent Associates, Inc., USA  
SOURCE: PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9934381	A1	19990708	WO 1998-US27641	19981229 <--
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5986879	A	19991116	US 1997-1683	19971231 <--
EP 1042770	A1	20001011	EP 1998-964954	19981229
R: DE				
JP 2002500409	T2	20020108	JP 2000-526934	19981229
PRIORITY APPLN. INFO.: US 1997-1683 A 19971231				
WO 1998-US27641 W 19981229				
AB Acyclic, asym. Et alkyl carbonates (particularly for use with a carbonaceous, e.g., graphite, anode) in electrolytes suitable for portable power sources, e.g., electrolytes included in separator of electrochem. cell are disclosed. Asym. alkyl carbonates having the general structural formula ETO-CO2R, where R is larger than Et, and most preferably equal to Bu, iso-Bu or sec-Bu, are particularly useful in causing the f.p. of the electrolytes of battery in which they are used to decrease dramatically, thus providing the key to low temp., high cycle life and high capacity				
for portable power sources.				
IT	155371-19-0, 1-Ethyl-3-methylimidazolium hexafluorophosphate			
RI: DEV (Device component use); USES (Uses)				
(asym. org. alkyl Et carbonates for nonaq. power sources)				
RN	155371-19-0 CAPLUS			
CN	1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)			
CM	1			
CRN	65039-03-4			
CMF	C6 H11 N2			



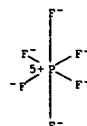
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L11 ANSWER 9 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

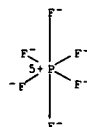
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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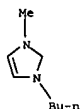
L11 ANSWER 10 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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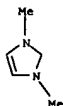
L11 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:447145 CAPLUS  
 DOCUMENT NUMBER: 131:285980  
 TITLE: Ionic liquids: a convenient solvent for environmentally friendly allylation reactions with tetraallylstannane  
 AUTHOR(S): Gordon, Charles M.; McCluskey, Adam  
 CORPORATE SOURCE: University of Strathclyde, Glasgow, G1 1XL, UK  
 SOURCE: Chemical Communications (Cambridge) (1999), (15), 1431-1432  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Ionic liqs. based on the 1-butyl-3-methylimidazolium cation have been used as solvents for the prepn. in good yield of homoallylic alcs. from tetraallylstannane and a range of aldehydes.  
 IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (solvent: butyl(methyl)imidazolium compds. as solvent for allylation of aldehydes with tetraallylstannane)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

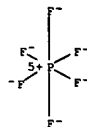
L11 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:440783 CAPLUS  
 DOCUMENT NUMBER: 131:214228  
 TITLE: A new tripodal anion receptor with C-H...X- hydrogen bonding  
 AUTHOR(S): Sato, Kiyoshi; Arai, Sadao; Yamagishi, Takamichi  
 CORPORATE SOURCE: Department of Applied Chemistry, Graduate School of Engineering, Tokyo Metropolitan University, Tokyo, 192-0397, Japan  
 SOURCE: Tetrahedron Letters (1999), 40(28), 5219-5222  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB 1,3,5-(Tris(3-n-butylimidazolium)methyl)-2,4,6-trimethylbenzene, which has three imidazolium groups connected through a 1,3,5-trimethylbenzene spacer, has been synthesized as a novel receptor for halide anions. This tripodal receptor is shown to bind strongly Cl-, Br-, and I- anions in CD3CN through electrostatic interactions and C-H...X- hydrogen bonds.  
 IT 243664-15-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (assocn. with halide anions)  
 RN 243664-15-5 CAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 45470-32-4  
 CMF C5 H9 N2



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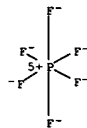
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 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

L11 ANSWER 11 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



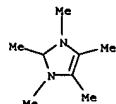
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L11 ANSWER 12 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



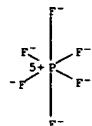
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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L11 ANSWER 13 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:415954 CAPIUS  
DOCUMENT NUMBER: 131:118385  
TITLE: Pentamethyl imidazolium salts  
AUTHOR(S): Ngo, Helen L.; McEwen, Alan B.  
CORPORATE SOURCE: Covalent Associates, Inc., Woburn, MA, 01801, USA  
SOURCE: Proceedings - Electrochemical Society (1999  
), 98-15(Selected Battery Topics), 683-692  
CODEN: PESODO; ISSN: 0161-6374  
PUBLISHER: Electrochemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The pentamethyl imidazolium bis(trifluoromethylsulfonyl)imide (M5IIm) and  
hexafluorophosphate (M5IPF6) salts were synthesized and investigated for  
use as electrolytes. These salts have use in nonaq. supercapacitors.  
IT 216300-14-0  
RL: DEV (Device component use); USES (Uses)  
(pentamethyl imidazolium salts as electrolytes for supercapacitors)  
RN 216300-14-0 CAPIUS  
CN 1H-Imidazolium, 1,2,3,4,5-pentamethyl-, hexafluorophosphate(1-) (9CI)  
(CA  
INDEX NAME)  
CH 1  
CRN 216299-74-0  
CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CH 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR  
THIS

L11 ANSWER 14 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:388384 CAPIUS  
DOCUMENT NUMBER: 131:21348  
TITLE: Battery comprising a liquid organic electrolyte with  
a  
conductive additive  
INVENTOR(S): Green, Kevin John; Wilson, James Charles; Howe, Susan  
Jennifer; Barnes, Philip Nicholas  
PATENT ASSIGNEE(S): The Secretary of State for Defence, UK  
SOURCE: PCT Int. Appl., 15 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9930379	A1	19990617	WO 1998-GB3615	19981208 <--
W: CN, GB, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
GB 2346256	A1	20000802	GB 2000-10773	19981208
GB 2346256	B2	20010822		
EP 1055262	A1	20001129	EP 1998-959000	19981208
EP 1055262	B1	20020320		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001526450	T2	20011218	JP 2000-524833	19981208
ES 2171053	T3	20020816	ES 1998-959000	19981208
US 6596441	B1	20030722	US 2000-530998	20000509

PRIORITY APPLN. INFO.: GB 1997-26008 A 19971210  
WO 1998-GB3615 W 19981208

AB An electrochem. cell comprises an anode, a solid cathode and an  
electrolyte. The electrolyte comprises an electrochem. reactive  
conductive salt, an org. liq. phase comprising one or more org. compds.,  
and less than 0.25M of an ionically charged additive, distinct from the  
electrochem. reactive conductive salt. The additive comprises a  
conductive salt which in use is not electrochem. reactive and which has a  
nitrogen contg. cation in a sufficient quantity that cond. is improved

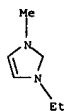
and  
percentage material utilization of the cathode is improved at increased  
discharge rates as compared with a cell using an electrolyte which does  
not contain the additive. An improvement of approx. 10% in cond. is  
achieved for a cell according to the invention using an electrolyte with  
an additive.

IT 155371-19-0  
RL: MOA (Modifier or additive use); USES (Uses)  
(battery comprising liq. org. electrolyte with conductive additive)  
RN 155371-19-0 CAPIUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)

CH 1  
CRN 65039-03-4  
CMF C6 H11 N2

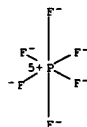
L11 ANSWER 13 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN (Continued)  
RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L11 ANSWER 14 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN (Continued)



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

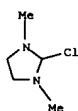
CH 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
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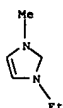
L11 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:353212 CAPLUS  
 DOCUMENT NUMBER: 131:116495  
 TITLE: Convergent synthesis of dolastatin 15 by solid phase coupling of N-methylamino acid  
 AUTHOR(S): Akaji, Kenichi; Hayashi, Yuzo; Kiso, Yoshiaki; Kuriyama, Naohiro  
 CORPORATE SOURCE: Department of Medicinal Chemistry, Kyoto Pharmaceutical University, Kyoto, 607-8414, Japan  
 SOURCE: Peptide Science (1999), Volume Date 1998, 35th, 9-12  
 CODEN: PSCIFQ; ISSN: 1344-7661  
 PUBLISHER: Protein Research Foundation  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A symposium report. Convergent synthesis of dolastatin 15, a cytostatic depsipeptide isolated from the Indian Ocean sea hare, has been described. For construction of the backbone, a single step condensation of peptide fragment and pyrrolidone fragment was successfully performed using 2-chloro-1,3-dimethyl-2-imidazolium hexafluorophosphate (CIP) developed by us. Coupling of N-methylamino acid on solid support was first achieved using CIP for the efficient synthesis of the peptide fragment.  
 IT 101385-69-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (convergent synthesis of dolastatin 15 by solid phase coupling of N-methylamino acid)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 ) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



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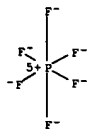
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 CCI CCS

L11 ANSWER 16 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:342872 CAPLUS  
 DOCUMENT NUMBER: 131:66405  
 TITLE: Electrochemical properties of imidazolium salt electrolytes for electrochemical capacitor applications  
 AUTHOR(S): McEwen, Alan B.; Ngo, Elen L.; LeCompte, Karen; Goldman, Jay L.  
 CORPORATE SOURCE: Covalent Associates, Incorporated, Woburn, MA, 01801, USA  
 SOURCE: Journal of the Electrochemical Society (1999), 146(5), 1687-1695  
 CODEN: JESQAN; ISSN: 0013-4651  
 PUBLISHER: Electrochemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The specific ionic cond., dynamic viscosity, and electrochem. stability of several imidazolium salts are reported as neat ionic liqs. and their solns. in several org. solvents. The temp. dependence of cond. and viscosity are analyzed for 1-ethyl-3-methylimidazolium (EMI+) and 1,2-dimethyl-3-n-propylimidazolium (DMPI+) salts, and the influence of bis(trifluoromethylsulfonyl)imide (Im-), bis(perfluoroethylsulfonyl)imide (Bet-), hexafluoroarsenate (AsF6-), hexafluorophosphate (PF6-), and tetrafluoroborate (BF4-) on these properties are discussed. These imidazolium salts make possible electrolytes with high concn. (>3 M), high room temp. cond. (up to 60 mS/cm), and a wide window of stability (>4 V at 20 VA/cm2). Differential scanning calorimetric results confirm a large glass phase for the ionic liqs., with substantial (>80.degree.) supercooling. Thermal gravimetric results indicate the imidazolium salts with Im- and Bet- anions to be thermally more stable than the Li salt analogs. The Vogel-Tammann-Fulcher interpretation accurately describes the cond. temp. dependence.  
 IT 155371-19-0 157310-73-1  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (electrochem. properties of imidazolium salt electrolytes for electrochem. capacitor applications)  
 RN 155371-19-0 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-)  
 ) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 65039-03-4  
 CMF C6 H11 N2



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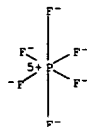
L11 ANSWER 15 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



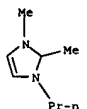
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L11 ANSWER 16 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

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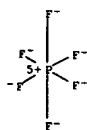


RN 157310-73-1 CAPLUS  
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 ) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 157310-70-8  
 CMF C8 H15 N2



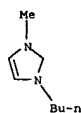
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L11 ANSWER 16 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR  
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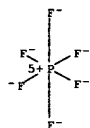
L11 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:228636 CAPLUS  
 DOCUMENT NUMBER: 131:50193  
 TITLE: Solvent extraction of strontium nitrate by a crown  
 ether using room-temperature ionic liquids  
 AUTHOR(S): Dai, Sheng; Ju, Y. H.; Barnes, C. E.  
 CORPORATE SOURCE: Chemical Technology Division, Oak Ridge National  
 Laboratory, Oak Ridge, TN, 37831-6181, USA  
 SOURCE: Journal of the Chemical Society, Dalton Transactions:  
 Inorganic Chemistry (1999), (8), 1201-1202  
 CODEN: JCDTBI; ISSN: 0300-9246  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The preliminary results presented show that unprecedentedly large  
 distribution coeff. (D) values can be achieved using ionic liqs. as extrn.  
 solvents for the sepn. of metal ions by crown ethers. This work  
 highlights the vast opportunities in sepn. applications for ionic liqs.  
 with crown ethers.  
 IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 227617-70-1, 1-Butyl-2,3-dimethylimidazolium hexafluorophosphate  
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or  
 chemical  
 process); PRP (Properties); PROC (Process); USES (Uses)  
 (solvent extrn. of strontium nitrate by crown ether using room-temp.  
 ionic liqs.)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



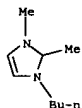
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CM 2  
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L11 ANSWER 17 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

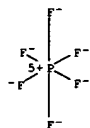


RN 227617-70-1 CAPLUS  
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 INDEX NAME)  
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 CRN 108203-89-0  
 CMF C9 H17 N2



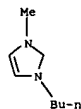
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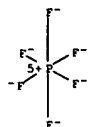
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L11 ANSWER 18 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:228628 CAPLUS  
 DOCUMENT NUMBER: 131:87674  
 TITLE: Diels-Alder reactions in ionic liquids  
 AUTHOR(S): Earle, Martyn J.; McCormac, Paul B.; Seddon, Kenneth  
 R.  
 CORPORATE SOURCE: School of Chemistry, The Queen's University of  
 Belfast, Belfast, BT9 5AG, UK  
 SOURCE: Green Chemistry (1999), 1(1), 23-25  
 CODEN: GRCHFJ; ISSN: 1463-9262  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 131:87674  
 AB Diels-Alder reactions in neutral ionic liqs. (such as 1-butyl-3-  
 methylimidazolium trifluoromethanesulfonate, 1-butyl-3-methylimidazolium  
 hexafluorophosphate, 1-butyl-3-methylimidazolium tetrafluoroborate,  
 1-butyl-3-methylimidazolium lactate) are reported. Rate enhancements and  
 selectivities similar to those of reactions performed in lithium  
 perchlorate-diethyl ether mixts. were obsd. As the ionic liqs. used have  
 no measurable vapor pressure, are thermally robust, will tolerate  
 impurities such as water, and are recyclable, it is envisaged that these  
 systems could be used on an industrial scale.  
 IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (Diels-Alder reactions in ionic liqs.)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



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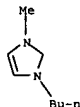
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REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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L11 ANSWER 19 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:216875 CAPLUS  
 DOCUMENT NUMBER: 130:229060  
 TITLE: Treatment of molten salt reprocessing wastes  
 Fields, Mark; Thied, Robert Charles; Seddon, Kenneth  
 Richard; Pitner, William Robert; Rooney, David  
 INVENTOR(S):  
 William  
 PATENT ASSIGNEE(S): British Nuclear Fuels PLC, UK  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

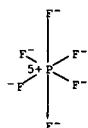
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9914160	A1	19990325	WO 1998-GB2743	19980916 <--
W: CA, CN, JP, KP, RU, US RM: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1019322	A1	20000719	EP 1998-944035	19980916
EP 1019322	B1	20010718		
R: FR, GB				
JP 2001516871	T2	20011002	JP 2000-511717	19980916
US 6468495	B1	20021022	US 2000-508324	20001020
PRIORITY APPLN. INFO.: GB 1997-19551 A 19970916 WO 1998-GB2743 W 19980916				
AB A method of removing from a metal salt ionic species contained therein involves contacting the metal salt with an ionic liq. to dissolve the metal salt, the ionic species or both. At least in the case where both the metal salt and the ionic species are dissolved, the resultant ionic liq. compn. is treated to sep. the ionic species therefrom and subsequently processed to recover the metal salt.				
IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses) (treatment of molten salt reprocessing wastes with)				
RN 174501-64-5 CAPLUS				
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)				
CM 1				
CRN 80432-08-2				
CMF C8 H15 N2				



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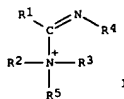
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L11 ANSWER 20 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:137258 CAPLUS  
 DOCUMENT NUMBER: 130:203904  
 TITLE: Electric double-layer capacitor containing diamine salt as electrolyte  
 Inventor(s): Takamukai, Yoshinori; Aoki, Ichiro; Shimamoto, Hideki  
 Kobayashi, Yukiya; Nakano, Tomoharu; Shiono, Kazushi; Seike, Hideo  
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan;  
 Sanyo  
 SOURCE: Chemical Industries Ltd.  
 Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKOKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

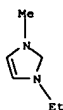
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11054377	A2	19990226	JP 1997-212788	19970807 <--
PRIORITY APPLN. INFO.: JP 1997-212788 19970807				
OTHER SOURCE(S): MARPAT 130:203904				
GI				



AB The capacitor has polarizable electrodes and a nonaq. electrolytic soln. contg. a salt whose cationic component is conjugated diamine compd. I or R4N:CR1N+R2R3R5 [R1 = (OH-substituted) C1-20 hydrocarbyl, H; R2-5 = C1-10 hydrocarbyl which may be substituted with OH, amino, nitro, cyano, carboxyl, ether, or aldehyde; R1-5 may combine to form a ring]. The capacitor has improved voltage resistance and is prevented from leaking of the electrolytic soln.  
 IT 155371-19-0, 1-Methyl-3-ethylimidazolium hexafluorophosphate  
 RL: DEV (Device component use); USES (Uses)  
 (elec. double-layer capacitor contg. diamine salt as electrolyte)  
 RN 155371-19-0 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

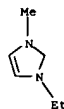
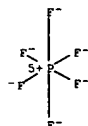
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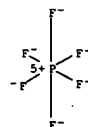
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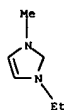
L11 ANSWER 21 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:133664 CAPLUS  
DOCUMENT NUMBER: 130:161833  
TITLE: Nonaqueous electrical storage device  
INVENTOR(S): McEwen, Alan B.; Evans, David A.; Blakley, Thomas J.;  
Goldman, Jay I.  
PATENT ASSIGNEE(S): Covalent Associates, Inc., USA  
SOURCE: PCT Int. Appl., 43 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908298	A1	19990218	WO 1998-US16626	19980810 <--
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5973913	A	19991026	US 1997-910146	19970812 <--
EP 1027712	A1	20000816	EP 1998-939902	19980810
R: DE, FR, GB				
PRIORITY APPLN. INFO.:			US 1997-910146 A	19970812
			WO 1998-US16626 W	19980810
AB				
An electrochem. capacitor is disclosed that features 2 sepd. high-surface-area C cloth electrodes sandwiched between 2 current collectors fabricated of a conductive polymer having a flow temp. >130.degree., with the perimeter of the electrochem. capacitor being sealed with a high-temp. gasket to form a single cell device. The gasket material is a thermoplastic stable at >100.degree., preferably a polyester or a polyurethane, and having a reflow temp. >130.degree. but below the softening temp. of the current collector material. The capacitor packaging has good mech. integrity over a wide temp. range, contributes little to the device equiv. series resistance, and is designed to be easily manufd. by assembly line methods. The individual cells can be stacked in parallel or series configuration to reach the desired device voltage and capacitance.				
IT				
155371-19-0, 1-Ethyl-3-methylimidazolium hexafluorophosphate RI: DEV (Device component use); USES (Uses) (electrolyte; nonaq. electrochem. capacitors having conductive polymer packaging contg.)				
RN				
155371-19-0 CAPLUS				
CN				
1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)				
CM				
1				
CRN				
65039-03-4				
CMF				
C6 H11 N2				

L11 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:127081 CAPLUS  
DOCUMENT NUMBER: 130:176356  
TITLE: Nonaqueous electrolyte for electrical storage devices  
INVENTOR(S): McEwen, Alan B.; Ein-Eli, Yair  
PATENT ASSIGNEE(S): Covalent Associates, Inc., USA  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

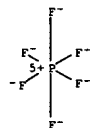
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908299	A1	19990218	WO 1998-US16625	19980810 <--
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5965054	A	19991012	US 1997-910143	19970812 <--
EP 1027713	A1	20000816	EP 1998-938481	19980810
R: DE, FR, GB				
JP 2001512903	T2	20010828	JP 2000-506668	19980810
PRIORITY APPLN. INFO.:			US 1997-910143 A	19970812
			WO 1998-US16625 W	19980810
OTHER SOURCE(S):			MARPAT 130:176356	
AB				
Nonaq. electrolytes for application in elec. storage devices such as electrochem. capacitors or batteries contain salts consisting of alkyl substituted, cyclic delocalized arom. cations, and their perfluoro derivs., and certain polyat. anions having a Van der Waals vol. .ltoreq.100 .ANG.3, preferably inorg. perfluoride anions and most preferably PF6-, the salts being dissolved in org. liqs., and preferably alkyl carbonate solvents and/or liq. SO2, at a concn. >0.5M and preferably >1.0M. Exemplary electrolytes comprise 1-ethyl-3-methylimidazolium hexafluorophosphate dissolved in a cyclic or acyclic alkyl carbonate and/or Me formate. These electrolytes have useful characteristics such as higher cond., higher concn., higher energy storage capabilities, and higher power characteristics compared to prior art electrolytes. Stacked capacitor cells using electrolytes of the invention permit high energy, high voltage storage.				
IT				
155371-19-0, 1-Ethyl-3-methylimidazolium hexafluorophosphate RI: DEV (Device component use); PRP (Properties); USES (Uses) (in nonaq. electrolyte for elec. storage devices)				
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155371-19-0 CAPLUS				
CN				
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L11 ANSWER 22 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



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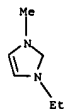
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CCI CCS



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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L11 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:71567 CAPLUS  
DOCUMENT NUMBER: 130:209442  
TITLE: Diels-Alder reactions in room-temperature ionic liquids  
AUTHOR(S): Fischer, T.; Sethi, A.; Walton, T.; Woolf, J.  
CORPORATE SOURCE: Department of Chemistry, Imperial College of Science, Technology and Medicine, London, SW7 2AY, UK  
SOURCE: Tetrahedron Letters (1999), 40(4), 793-796  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The Diels-Alder cycloaddn. reaction between Me acrylate and cyclopentadiene was investigated in a no. of air and moisture stable ionic liqs., such as 1-butyl-3-methylimidazolium perchlorate or 1-ethyl-3-methylimidazolium hexafluorophosphate. The endo/exo ratio of the reaction has been used as an initial probe of the nature of the solvents.  
IT 155371-19-0, 1-Ethyl-3-methylimidazolium hexafluorophosphate  
RL: NUU (Other use, unclassified); USES (Uses)  
(Diels-Alder reaction of acrylate with cyclopentadiene in room-temp. ionic liqs.)  
RN 155371-19-0 CAPLUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

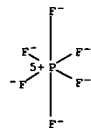
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CMF C6 H11 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

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CRN 16919-18-9  
CMF F6 P  
CCI CCS

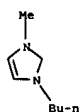
L11 ANSWER 23 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L11 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:35834 CAPLUS  
DOCUMENT NUMBER: 130:183391  
TITLE: Ionic liquid-polymer gel electrolytes from hydrophilic and hydrophobic ionic liquids  
AUTHOR(S): Fuller, Joan; Breda, Amy C.; Carlin, Richard T.  
CORPORATE SOURCE: SAF/AGRT, 1060 Air Force Pentagon, Washington, DC, 20330-1060, USA  
SOURCE: Journal of Electroanalytical Chemistry (1998), 459(1), 29-34  
CODEN: JECHES; ISSN: 0368-1874  
PUBLISHER: Elsevier Science S.A.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Ionic liq.-polymer gels were prepd. by incorporating hydrophilic EMIBF4 and EMI(triflate) (EMI+ = 1-ethyl-3-methylimidazolium) and hydrophobic BMIPF6 (BMH+ = 1-(1-butyl)-3-methylimidazolium) room-temp. ionic liqs. into a poly(vinylidene fluoride)-hexafluoropropylene copolymer (PVdF(HFP)) matrix. Gel electrolytes prepd. with ionic liq.:PVdF(HFP) mass ratios of 2:1 exhibited ionic conductivities of > 10-3 S cm-1 at room temp. and > 10-2 S cm-1 at 100.degree.C. The BMIPF6-PVdF(HFP) gel was incorporated into electrochem. cells, employing graphite intercalation electrodes for both the anode and cathode, to construct single and bipolar cells displaying open-circuit voltages of 3.77 and 7.86 V, resp. New inexpensive preparative routes for the hydrophilic ionic liqs. were developed that utilize the metathesis reaction of EMICI with the appropriate ammonium salt in acetone or acetonitrile to produce high purity products.  
IT 174501-64-5P, 1-Butyl-3-methylimidazolium hexafluorophosphate  
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(prepn. and characterization of ionic liq.-polymer gel electrolytes from hydrophilic and hydrophobic ionic liqs.)  
RN 174501-64-5 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

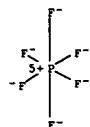
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CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

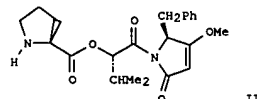
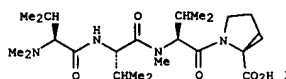
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CMF F6 P

L11 ANSWER 24 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
CCI CCS



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR  
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FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

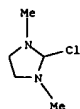
L11 ANSWER 25 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:8658 CAPLUS  
DOCUMENT NUMBER: 130:168635  
TITLE: Convergent Synthesis of Dolastatin 15 by Solid Phase  
Coupling of an N-Methylamino Acid  
AUTHOR(S): Akaji, Kenichi; Hayashi, Yuzo; Kiso, Yoshiaki;  
Kuriyama, Naohiro  
CORPORATE SOURCE: Department of Medicinal Chemistry, Kyoto  
Pharmaceutical University, Yamashina-ku Kyoto,  
607-8414, Japan  
SOURCE: Journal of Organic Chemistry (1999), 64(2),  
405-411  
CODEN: JOCEAH; ISSN: 0022-3263  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



II

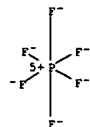
AB Convergent synthesis of dolastatin 15, a cytostatic depsipeptide isolated  
from the Indian Ocean sea hare, has been described. For construction of  
the backbone, a single-step condensation of peptide fragment I and  
pyrrolidone fragment II was successfully performed using  
2-chloro-1,3-dimethyl-2-imidazolium hexafluorophosphate (CIP) developed  
by us as an efficient coupling reagent. Coupling of an N-methylamino  
acid  
on solid support was first achieved using CIP for the efficient synthesis  
of peptide fragment I. The effectiveness of CIP for the coupling of  
N-methylamino acids in soln. and on solid support were clarified by the  
syntheses of model di- and tripeptides.  
IT 101385-69-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(coupling agent; prepn. of dolastatin 15 via CIP-mediated coupling of  
N-methylamino acids on solid support)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-,  
hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)  
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

L11 ANSWER 25 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



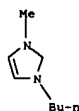
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CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



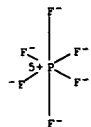
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR  
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FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L11 ANSWER 26 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1998:804016 CAPLUS  
DOCUMENT NUMBER: 130:38121  
TITLE: Process for the hydroformylation of olefins  
INVENTOR(S): Olivier, Helene; Commereuc, Dominique; Drochon,  
Sebastien  
PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.  
SOURCE: Eur. Pat. Appl., 7 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:  
PATENT NO. KIND DATE APPLICATION NO. DATE  
EP 882698 A1 19981209 EP 1998-401203 19980519 <--  
EP 882698 B1 20020814  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO  
FR 2763938 A1 19981204 FR 1997-6570 19970527 <--  
FR 2763938 B1 19991022  
US 6040483 A 20000321 US 1998-84352 19980527  
FR 1997-6570 A 19970527  
PRIORITY APPLN. INFO.: CASREACT 130:38121; MARPAT 130:38121  
OTHER SOURCE(S):  
AB Liq. phase hydroformylation of olefins by H-CO is carried out in presence  
of a catalyst comprising a transition metal compd., a phosphine oxide,  
and  
a quaternary ammonium or phosphonium salt free from Sn or Ge.  
Thus, 2-pentene was hydroformylated in presence of 3-butyl-1-  
methylimidazolium hexafluorophosphate, Rh(acac)(CO)2, and Ph3PO to give  
65% 2-methylpentanal and 17% hexanal.  
IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts for hydroformylation of olefins)  
RN 174501-64-5 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)  
CM 1  
CRN 80432-08-2  
CMF C8 H15 N2



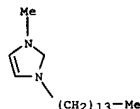
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CRN 16919-18-9  
CMF F6 P

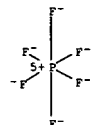


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
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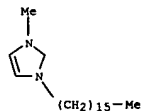
L11 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1998:780505 CAPLUS  
DOCUMENT NUMBER: 130:132039  
TITLE: Ionic liquid crystals: hexafluorophosphate salts  
AUTHOR(S): Gordon, Charles M.; Holbrey, John D.; Kennedy, Alan  
CORPORATE SOURCE: Department of Pure and Applied Chemistry, University  
of Strathclyde, Glasgow, G1 1XL, UK  
SOURCE: Journal of Materials Chemistry (1998),  
8(12), 2627-2636  
CODEN: JMACEP; ISSN: 0959-9428  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Novel hexafluorophosphate salts, based on N,N'-dialkylimidazolium and  
substituted N-alkylpyridinium cations, display liq. cryst. behavior at  
temps. above their m.p. The temp. range over which liq. cryst. behavior  
is obsd. increases markedly with increasing alkyl chain length. Alkyl  
substitution at the 3- and 4-positions on the pyridinium ring results in  
a decrease in the m.p. compared with the equiv. unsubstituted salt, but  
also leads to a large decrease in the tendency towards liq. cryst. behavior  
(or mesogenicity). The salts prepd. are fully characterized using a wide  
variety of techniques, including NMR and IR spectroscopy, DSC, single  
crystal x-ray diffraction in the case of 1-dodecyl-3-methylimidazolium  
hexafluorophosphate. Crystallog. data are given for 1-dodecyl-3-  
methylimidazolium hexafluorophosphate. The effect of prepg. mixts.  
contg. different proportions of two cations is also reported.  
IT 219947-94-1P 219947-95-2P 219947-96-3P  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(prepn. and liq. crystal properties of)  
RN 219947-94-1 CAPLUS  
CN 1H-Imidazolium, 1-methyl-3-tetradecyl-, hexafluorophosphate(1-) (9CI)  
(CA INDEX NAME)  
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CRN 180268-46-6  
CMF C18 H35 N2



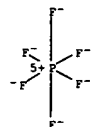
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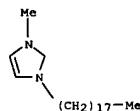
RN 219947-95-2 CAPLUS  
CN 1H-Imidazolium, 1-hexadecyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)  
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CRN 81995-03-1  
CMF C20 H39 N2



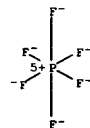
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CRN 16919-18-9  
CMF F6 P  
CCI CCS



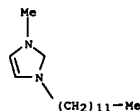
RN 219947-96-3 CAPLUS  
CN 1H-Imidazolium, 1-methyl-3-octadecyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*  
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



IT 219947-93-0P  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
(prepn., phase transitions and crystal structure of)  
RN 219947-93-0 CAPLUS  
CN 1H-Imidazolium, 1-dodecyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)  
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CRN 46928-10-3  
CMF C16 H31 N2

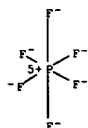


L11 ANSWER 27 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

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CRN 16919-18-9  
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CCI CCS

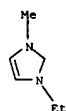


REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR  
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FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L11 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:714515 CAPLUS  
DOCUMENT NUMBER: 130:59690  
TITLE: Imidazolium electrolytes and plastic prismatic  
packaging for nonaqueous electrochemical capacitors  
AUTHOR(S): McEwen, Alan B.; Goldman, Jay L.; Ngo, Helen L.  
CORPORATE SOURCE: Covalent Associates, Inc., Woburn, MA, 01801, USA  
SOURCE: Proceedings of the Power Sources Conference (1998), 38th, 1-4  
CODEN: PPOCFD  
PUBLISHER: National Technical Information Service  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The authors present performance data from prismatic packages, unit cell and stacks, constructed from polymeric materials with solvent free imidazolium salt electrolytes and activated C electrodes. Electrolytes based on solvent free ionic liqs. provide addnl. benefits in packaging and high temp. applications. Here, the authors discuss their work developing plastic prismatic packaging with these ionic liqs. The prismatic cells are capable of withstanding high voltages (4V) and a wide temp. range (-50.degree. to > 130.degree.).  
IT 155371-19-0  
RL: DEV (Device component use); USES (Uses)  
(imidazolium electrolytes and plastic prismatic packaging for nonaq. electrochem. capacitors)  
RN 155371-19-0 CAPLUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 65039-03-4  
CMF C6 H11 N2

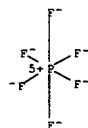


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

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L11 ANSWER 28 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

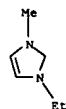


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L11 ANSWER 29 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:677114 CAPLUS  
DOCUMENT NUMBER: 130:29457  
TITLE: Thermal properties of imidazolium ionic liquid electrolytes  
AUTHOR(S): McEwen, Alan B.; Ngo, Helen L.; LeCompte, Karen  
CORPORATE SOURCE: Covalent Associates, Inc., Woburn, MA, USA  
SOURCE: Proceedings of the Conference of the North American Thermal Analysis Society, 26th, Cleveland, Sept. 13-15, 1998 (1998), 21-26. Editor(s): Williams, Kathryn R. Omnipress: Madison, Wis.  
CODEN: 66VEAV  
DOCUMENT TYPE: Conference  
LANGUAGE: English

AB The authors investigated the thermal properties of several imidazolium salts using DSC and TGA/SDTA data. Many of these salts are ambient and sub-ambient temp. ionic liqs., which form glasses at low temps. and have minimal vapor pressure up to their thermal decompn. temp. Thermal decompn. is endothermic with the inorg. anions and exothermic with the org. anions investigated. Halide anions drastically reduce the thermal stability of these salts. We have obsd. that aluminum TGA pans catalyze the decompn. of the salts with the inorg. fluoride anions. The imidazolium cation is thermally more stable than the tetraalkyl ammonium cations.  
IT 155371-19-0 157310-73-1 216300-12-8  
216300-13-9 216300-14-0  
RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(thermal properties and thermal decompn. of)  
RN 155371-19-0 CAPLUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 65039-03-4  
CMF C6 H11 N2

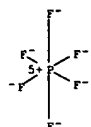


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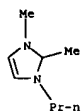
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CCI CCS



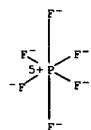


RN 157310-73-1 CAPLUS  
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 (CA INDEX NAME)  
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 CRN 157310-70-8  
 CMF C8 H15 N2

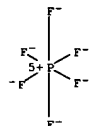


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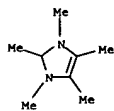
CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



RN 216300-12-8 CAPLUS  
 CN 1H-Imidazolium, 1-methyl-3-(1-methylethyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-06-0

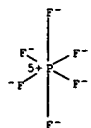


RN 216300-14-0 CAPLUS  
 CN 1H-Imidazolium, 1,2,3,4,5-pentamethyl-, hexafluorophosphate(1-) (9CI)  
 (CA INDEX NAME)  
 CM 1  
 CRN 216299-74-0  
 CMF C8 H15 N2

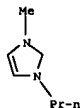


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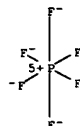


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR  
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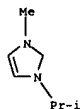
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CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



RN 216300-13-9 CAPLUS  
 CN 1H-Imidazolium, 1-methyl-3-(1-methylethyl)-, hexafluorophosphate(1-) (9CI)  
 (CA INDEX NAME)

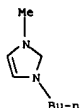
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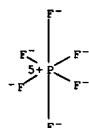
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 CRN 16919-18-9  
 CMF F6 P

L11 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:655220 CAPLUS  
 DOCUMENT NUMBER: 130:38266  
 TITLE: Regioselective alkylation in ionic liquids  
 AUTHOR(S): Earle, Martyn J.; McCormac, Paul B.; Seddon, Kenneth R.  
 CORPORATE SOURCE: The School of Chemistry, The Queen's University of Belfast, Belfast, BT9 5AG, UK  
 SOURCE: Chemical Communications (Cambridge) (1998), (20), 2245-2246  
 CODEN: CHCOFS; ISSN: 1359-7345  
 PUBLISHER: Royal Society of Chemistry  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The room temp. ionic liq. 1-butyl-3-methylimidazolium hexafluorophosphate is used as a 'green' recyclable alternative to dipolar aprotic solvents for the regioselective alkylation at the heteroatom of indole and 2-naphthol.  
 IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate  
 RL: NUU (Other use, unclassified); USES (Uses) (regioselective alkylation in ionic liqs.)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



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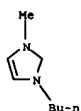
CM 2  
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 CMF F6 P  
 CCI CCS



L11 ANSWER 31 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1998:583167 CAPLUS  
 DOCUMENT NUMBER: 129:177187  
 TITLE: Diels-Alder reaction in a highly polar medium  
 INVENTOR(S): Olivier, Helene; Hirschauer, Andre  
 PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.  
 SOURCE: Fr. Demande, 12 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757850	A1	19980703	FR 1996-16092	19961227 <--
FR 2757850	B1	19990416		
US 5892124	A	19990406	US 1997-999390	19971229 <--
			FR 1996-16092	19961227

 PRIORITY APPLN. INFO.: MARPAT 129:177187  
 OTHER SOURCE(S):  
 AB The reaction is carried out in a liq. quaternary ammonium or quaternary phosphonium salt having a noncoordinating anion, optionally in the presence of a Lewis acid or transition metal complex catalyst. Thus, a 2-phase system comprising 2.7 g cyclopentadiene, 2.8 g Me vinyl ketone, and 3 mL 3-butyl-1-methylimidazolium tetrafluoroborate was stirred at room temp., with product recovery by addn. of heptane. After 2 h reaction time the cyclopentadiene conversion was 95% and the endo/exo ratio of the product was 6.8.  
 IT 174501-64-5  
 RL: NUU (Other use, unclassified); USES (Uses) (Diels-Alder reaction in a highly polar medium)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2

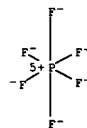


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

L11 ANSWER 30 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
 FORMAT

L11 ANSWER 31 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 32 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:553059 CAPIUS  
DOCUMENT NUMBER: 129:276313

TITLE: New syntheses of  
bis(tetramethylene)fluoroformamidinium

AUTHOR(S): m hexafluorophosphate (BTFFH) and 1,3-dimethyl-2-  
fluoro-4,5-dihydro-1H-imidazolium hexafluorophosphate  
(DFIH). Utility in peptide coupling reactions

CORPORATE SOURCE: El-Faham, Ayman  
Faculty of Science, Department of Chemistry,  
University of Alexandria, Alexandria, Egypt  
SOURCE: Organic Preparations and Procedures International ( 1998), 30(4), 477-481  
CODEN: OPPIAK; ISSN: 0030-4948

PUBLISHER: Organic Preparations and Procedures, Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB BTFFH was prepd. from bis(tetramethylene)urea by reaction with oxalyl  
chloride and then KF and KPF<sub>6</sub> in acetonitrile. DFIH was prepd. by a  
similar procedure. Peptide coupling reagents BTFFH and DFIH were  
compared

IT 164298-27-5P, DFIH  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(syntheses of bis(tetramethylene)fluoroformamidinium  
hexafluorophosphate and dimethylfluorodihydroimidazolium  
hexafluorophosphate as peptide coupling reagents)

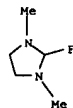
RN 164298-27-5 CAPIUS

CN 1H-imidazolium, 2-fluoro-4,5-dihydro-1,3-dimethyl-,  
hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

CM 1

CRN 164298-26-4

CMF C5 H10 F N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

L11 ANSWER 33 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:549212 CAPIUS  
DOCUMENT NUMBER: 129:244834

TITLE: Synthesis and physical-chemical properties of ionic  
liquids based on 1-n-butyl-3-methylimidazolium cation  
Suarez, P. A. Z.; Einloft, S.; Dullius, J. E. L.; De  
Souza, R. F.; Dupont, J.

CORPORATE SOURCE: Instituto de Quimica, UFRGS, Av. Bento Goncalves, CEP  
91501-970, Porto Alegre, Brazil

SOURCE: Journal de Chimie Physique et de Physico-Chimie  
Biologique (1998), 95(7), 1626-1639  
CODEN: JCPBAN; ISSN: 0021-7689

PUBLISHER: EDP Sciences  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The reaction of 1-n-butyl-3-methylimidazolium chloride (BMI.Cl) with  
sodium tetrafluoroborate or sodium hexafluorophosphate affords the molten  
salts BMI.X (1, X=BF<sub>4</sub> and 2, X=PF<sub>6</sub>). Comps. 1 and 2 are viscous liqs.  
within a wide range of temp. (down to 192 K). IR, NMR, d., viscosity and  
cond. measurements suggest that compd. 2 behaves quasi-mol. Compd. 1 is  
quasi-mol. below 279 K, but at higher temps. is probably composed of  
imidazolium and tetrafluoroborate ions in an extended hydrogen-bonded  
network.

IT 174501-64-5P, 1-Butyl-3-methylimidazolium hexafluorophosphate  
RL: PREP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(reaction of 1-n-butyl-3-methylimidazolium chloride with sodium  
tetrafluoroborate or sodium hexafluorophosphate)

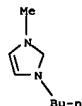
RN 174501-64-5 CAPIUS

CN 1H-imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)

CM 1

CRN 80432-08-2

CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

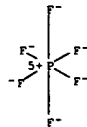
CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

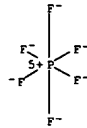
L11 ANSWER 32 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L11 ANSWER 33 OF 82 CAPIUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L11 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:504191 CAPLUS

DOCUMENT NUMBER: 129:266177

TITLE: Room temperature ionic liquids as novel media for 'clean' liquid-liquid extraction  
AUTHOR(S): Huddleston, Jonathan G.; Rogers, Robin D.  
CORPORATE SOURCE: Department of Chemistry, The University of Alabama, Tuscaloosa, AL, 35487, USA  
SOURCE: Chemical Communications (Cambridge) (1998), (16), 1765-1766  
CODEN: CHCOFS; ISSN: 1359-7345

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The partitioning of simple, substituted-benzene deriva. between water and the room temp. ionic liq., butylmethylimidazolium hexafluorophosphate, is based on the solutes' charged state or relative hydrophobicity; room temp.

ionic liqs. thus may be suitable candidates for replacement of volatile org. solvents in liq.-liq. extn. processes.

IT 174501-64-5

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(room temp. ionic liqs. as media for clean liq.-liq. extn.)

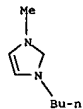
RN 174501-64-5 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 80432-08-2

CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS

L11 ANSWER 35 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:89741 CAPLUS

DOCUMENT NUMBER: 128:148774

TITLE: Selective Catalytic Hydrodimerization of 1,3-Butadiene

by Palladium Compounds Dissolved in Ionic Liquids  
AUTHOR(S): Dullius, Jeane E. L.; Suarez, Paulo A. Z.; Einloft, Sandra; de Souza, Roberto F.; Dupont, Jairton; Fischer, Jean; De Cian, Andre

CORPORATE SOURCE: Grupo de Catalise Instituto de Quimica, UFRGS, Porto Alegre, 91501-970, Brazil

SOURCE: Organometallics (1998), 17(5), 815-819

CODEN: ORGN7; ISSN: 0276-7333

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Palladium(II) compds. dissolved in 1-n-butyl-3-methylimidazolium tetrafluoroborate (BMI.cntdot.BF4) ionic liq. are able to catalyze the hydrodimerization of 1,3-butadiene. In most of the cases, only the 1,3-butadiene dimer 1,3,6-octatriene and the telomer octa-2,7-dien-1-ol were obtained. The products' selectivity and catalytic activity depend

on the reaction conditions. 1,3-Butadiene conversion up to 28%, a turnover frequency (TOF) of 118 h<sup>-1</sup>, and a selectivity of 94% on telomer were achieved with (BMI)2PdCl4 dissolved in BMI.cntdot.BF4. The 1,3-butadiene conversion and TOF were significantly increased to 49% and 204 h<sup>-1</sup>, resp.,

by a 5-atm pressure of carbon dioxide. The reactions were performed under homogeneous conditions at 70.degree.. However, at temps. <5.degree., a two-phase system is formed and the products are easily removed from the reaction mixt. by simple decanting. The recovered ionic catalyst soln. can be reused several times without any significant changes in the catalytic performance. The structure of the new catalyst precursor (BMI)2PdCl4 was detd. by x-ray diffraction anal.

IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate

RL: NUU (Other use, unclassified); USES (Uses)

(ionic liq. for selective hydrodimerization of butadiene to octadienol using butylmethylimidazolium chloro palladate catalyst)

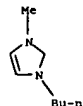
RN 174501-64-5 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

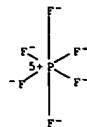
CRN 80432-08-2

CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

L11 ANSWER 34 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

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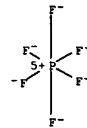
L11 ANSWER 35 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS

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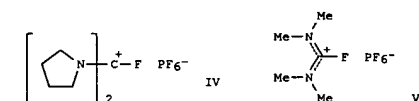
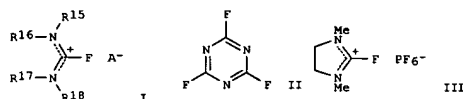
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L11 ANSWER 36 OF 82 CAPIUS COPYRIGHT 2003 ACS ON STN  
ACCESSION NUMBER: 1998:79386 CAPIUS  
DOCUMENT NUMBER: 128:154386  
TITLE: Synthesis and use of amino acid fluorides as peptide coupling reagents  
INVENTOR(S): Carpio, Louis A.; El-faham, Ayman Ahmed  
PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., USA  
SOURCE: U.S., 23 pp., Cont.-in-part of U.S. 5,360,928.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5712418	A	19980127	US 1994-284964	19940802 <--
US 5360928	A	19941101	US 1989-426121	19891023 <--
CA 2070419	AA	19910424	CA 1990-2070419	19901022 <--
ES 2074699	T3	19950916	ES 1991-900571	19901022 <--
JP 2832643	B2	19981209	JP 1990-500766	19901022 <--
US 5750767	A	19980512	US 1995-466319	19950606 <--
WO 9604297	A1	19960215	WO 1995-US9528	19950727 <--

W. AU, CA, JP  
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
AU 9531520 A1 19960304 AU 1995-31520 19950727 <--  
US 6040422 A 20000321 US 1998-2860 19980105  
US 6534627 B1 20030318 US 1999-255503 19990223  
PRIORITY APPLN. INFO.: US 1989-426121 A2 19891023  
WO 1990-US6061 A 19901022  
US 1994-284964 A1 19940802  
US 1995-466319 A3 19950606  
WO 1995-US9528 W 19950727  
US 1998-2860 A3 19980105

OTHER SOURCE(S): MARPAT 128:154386  
GI



AB A peptide is prepd. by reacting an amino acid BLK-AA(X)-OH (BLK = H or an N-amino protecting group; AA = an amino acid residue; X = H or a

L11 ANSWER 36 OF 82 CAPIUS COPYRIGHT 2003 ACS ON STN (Continued)  
protecting group) with a new fluorinating agent, fluoroformamidinium salt (I; R15, R16, R17, R18 = alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl; or NR15R16 or NR17R18 form a C.g.toreq.10 5- or 6-membered

ring contg. a N ring atom and 4-5 ring C atoms; or NR16R17 form a C.g.toreq.10 5- or 6-membered ring contg. 2 N ring atoms and 3-4 ring C atoms; A- = counter ion) and reacting the resulting amino acid fluoride BLK-AA(X)-F with an amino acid or peptide having a free amino group and a protected CO2H group. The fluoroformamidinium salt I is also used as a condensing agent for directly coupling amino acid derivs. in the assembly of peptides. Thus, various protected amino acid fluorides, e.g. Fmoc-Gly-F, Fmoc-Ala-F, Fmoc-Val-F, Fmoc-Leu-F, Fmoc-Ile-F, Fmoc-Phe-F, Fmoc-Trp-F, Fmoc-Ser(tBu)-F, Fmoc-Thr(tBu)-OH, Fmoc-Lys(Boc)-F, and Fmoc-Asp(OtBu)-F, were prepd. by reacting the corresponding protected amino acids with cyanuric fluoride (II) (prepn. given) or a fluoroformamidinium salt, e.g. 1,3-dimethyl-2-fluoroimidazolium hexafluorophosphate (III) (prepn. given),

bis(tetramethylene)fluoroformamidinium hexafluorophosphate (IV) (prepn. given), or tetramethylfluoroformamidinium hexafluorophosphate (V) (prepn. given). A mixt. of 0.5 mmol H-Ala-OMe.HCl and 1.5 mmol Na2CO3 in 10 mL CH2Cl2 and 5 mL H2O was added to 0.6 mmol Fmoc-Phe-F in 5 mL CH2Cl2 and stirred at

room temp. for 30 min to give 87.3% Fmoc-Phe-Ala-OMe. For direct coupling reaction, a soln. of 0.75 mmol V in 5 mL CH2Cl2 was added to 0.5 mmol Fmoc-Phe-OH and 0.5 mmol H-Ala-OMe.HCl in 10 mL CH2Cl2 and 5 mL H2O contg.

1.5 mmol Na2CO3 and stirred at room temp. for 1 h to give 87.3% Fmoc-Phe-Ala-OMe. Larger peptides, e.g. leucine enkephalin, H-Tyr-Gly-Gly-Phe-Leu-OH, was also prepd. by the two-phase soln. method involving direct coupling of H-Leu-OtBu.HCl with Fmoc-Phe-OH, Fmoc-Gly-OH,

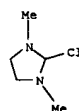
and Fmoc-Tyr(OtBu)-OH, using V as the coupling agent.  
IT 101385-69-7, 1,3-Dimethyl-2-chloroimidazolium hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis and use of amino acid fluorides as peptide coupling reagents

and fluoroformamidinium salt as fluorinating or peptide coupling agent)

RN 101385-69-7 CAPIUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

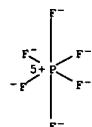
CM 1

CRN 75126-82-8  
CMF C5 H10 Cl N2



L11 ANSWER 36 OF 82 CAPIUS COPYRIGHT 2003 ACS ON STN (Continued)  
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



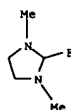
IT 164298-27-5, 1,3-Dimethyl-2-fluoroimidazolium hexafluorophosphate  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(synthesis and use of amino acid fluorides as peptide coupling reagents

and fluoroformamidinium salt as fluorinating or peptide coupling agent)

RN 164298-27-5 CAPIUS  
CN 1H-Imidazolium, 2-fluoro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

CM 1

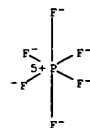
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CMF C5 H10 F N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 36 OF 82 CAPIUS COPYRIGHT 2003 ACS ON STN (Continued)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L11 ANSWER 37 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:59354 CAPLUS  
DOCUMENT NUMBER: 128:167423  
TITLE: Preparation of N-alkyl-N'-methylimidazolium  
inorganic acid salts  
INVENTOR(S): Ue, Makoto; Takeda, Masayuki; Takahashi, Takako;  
Takehara, Masahiro  
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKOXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10017553	A2	19980120	JP 1996-173505	19960703 <--
PRIORITY APPLN. INFO.:		JP 1996-173505	19960703	

OTHER SOURCE(S): MARPAT 128:167423

AB Title compds., useful as surfactants, agents for ink-jet printing paper, electrolytes for electrochem. elements, catalysts to harden resins, and phase transfer catalysts (no data), are prepd. by methylation of N-alkylimidazolines with (MeO)2CO in MeOH and anion exchange reaction of N-alkyl-N'-methylimidazolium Me carbonates by feeding reaction mixts. into aq. solns. of inorg. acids. 1-Ethyl-2-methylimidazoline was treated with (MeO)2CO in MeOH (in a system comprising 350 ppm H2O) at 135.degree. for 7 h to give 98% 1-ethyl-2,3-dimethylimidazolium Me carbonate, which was added to aq. soln. of F6PH to give 98% 1-ethyl-2,3-dimethylimidazolium hexafluorophosphate.

IT 202812-34-8P  
RI: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of alkylimidazolium salts by methylation and anion exchange reaction)

RN 202812-34-8 CAPLUS

CN 1H-Imidazolium, 1-ethyl-4,5-dihydro-2,3-dimethyl-,

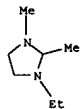
hexafluorophosphate(1-)

(9CI) (CA INDEX NAME)

CH 1

CRN 186827-53-2

CMF C7 H15 N2



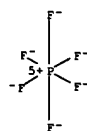
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CH 2

CRN 16919-18-9

L11 ANSWER 37 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CMF F6 P  
CCI CCS



L11 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:530052 CAPLUS  
DOCUMENT NUMBER: 127:207252  
TITLE: Ionic liquid-polymer gel catalytic membrane  
AUTHOR(S): Carlin, Richard T.; Fuller, Joan  
CORPORATE SOURCE: Covalent Associates, Inc., Woburn, MA, 01801, USA  
SOURCE: Chemical Communications (Cambridge) (1997),  
(15), 1345-1346  
CODEN: CHCOFS; ISSN: 1359-7345  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A novel catalytic membrane for heterogeneous hydrogenation is fabricated by incorporating Pd into a gas-permeable ionic liq.-polymer gel composed of 1-n-butyl-3-methylimidazolium hexafluorophosphate and poly(vinylidene fluoride)-hexafluoropropylene copolymer.

IT 174501-64-5, 1-Butyl-3-methylimidazolium hexafluorophosphate

RI: CAT (Catalyst use); USES (Uses)  
(ionic liq. fluoropolymer gel-palladium catalytic membrane for hydrogenation)

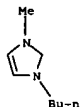
RN 174501-64-5 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CH 1

CRN 80432-08-2

CMF C8 H15 N2



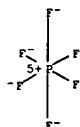
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CH 2

CRN 16919-18-9

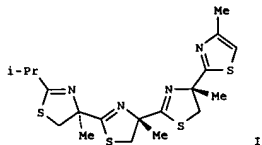
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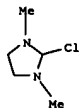
L11 ANSWER 38 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L11 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1997:429736 CAPLUS  
DOCUMENT NUMBER: 127:81658  
TITLE: Convergent synthesis of (-)-mirabazone B using a chloroimidazolidium coupling reagent, CIP  
AUTHOR(S): Kuriyama, Naohiro; Akaji, Kenichi; Kiso, Yoshiaki  
CORPORATE SOURCE: Dep. Medicinal Chem., Kyoto Pharmaceutical Univ., Kyoto, 607, Japan  
SOURCE: Tetrahedron (1997), 53(25), 8323-8334  
CODEN: TETRAH; ISSN: 0040-4020  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 127:81658  
GI



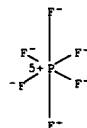
AB (-)-Mirabazone B (I), an alkaloid consisting of four successive thiazoline/thiazole rings, has been synthesized in a convergent route. The key intermediate, a linear tripeptide amide composing of three S-benzyl-2-methylcysteine residues, was prepd. using 2-chloro-1,3-dimethylimidazolidium hexafluorophosphate (CIP) in the presence of 1-hydroxy-7-azabenzotriazole (HQA) as a coupling agent. The successive thiazoline/thiazole rings were constructed by TiCl4-mediated cyclization followed by Hantzsch reaction without difficulty.  
IT 101385-69-7, 2-Chloro-1,3-dimethylimidazolidium hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis of mirabazone B using a chloroimidazolidium coupling reagent)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

L11 ANSWER 39 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



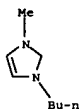
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
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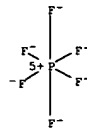
L11 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1997:426650 CAPLUS  
DOCUMENT NUMBER: 127:182288  
TITLE: Enlarged electrochemical window in dialkylimidazolium cation based room-temperature air and water-stable molten salts  
AUTHOR(S): Jeanne  
CORPORATE SOURCE: Suarez, Paulo A. Z.; Selbach, Vania M.; Dullius, E. L.; Einloft, Sandra; Pietnicki, Clarisse M. S.; Azambuja, Denise S.; de Souza, Roberto F.; Dupont, Jaiton  
Inst. de Quimica, UFRGS, Porto Alegre, Brazil  
SOURCE: Electrochimica Acta (1997), 42(16), 2533-2535  
CODEN: ELCAAV; ISSN: 0013-4686  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The electrochem. windows of the ionic liqs. 1-butyl-3-methylimidazolium tetrafluoroborate (BMI+)(BF4-) and 1-butyl-3-methylimidazolium hexafluorophosphate (BMI+)(PF6-) were studied at Pt, vitreous C, W and Au electrodes. The lowest current densities and widest electrochem. windows were found on W and vitreous C 6.10 and 5.45 V for (BMI+)(BF4-) and >7.10 and 6.35 V for (BMI+)(PF6-), resp.  
IT 174501-64-5  
RL: PEP (Physical, engineering or chemical process); PROC (Process) (enlarged electrochem. window in dialkylimidazolium cation based room-temp. air and water-stable molten salts at Pt, vitreous C, W and Au electrodes)  
RN 174501-64-5 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 80432-08-2  
CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

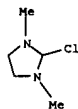
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 40 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 41 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:343107 CAPLUS  
DOCUMENT NUMBER: 126:330742  
TITLE: Total synthesis of (-)-mirabazole B using a chloroimidazolidium reagent, CIP  
AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Kiso, Yoshiaki  
CORPORATE SOURCE: Department of Medicinal Chemistry, Kyoto Pharmaceutical University, Kyoto, 607, Japan  
SOURCE: Peptide Chemistry (1996), 34th, 53-56  
CODEN: PECHDP; ISSN: 0388-3698  
PUBLISHER: Protein Research Foundation  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A symposium report on the convergent synthesis of (-)-mirabazole B, a tetrathiazoline/thiazole alkaloid isolated from blue-green alga. A linear tripeptide amide composing of three S-benzyl-2-methylcysteine residues, a key intermediate, was synthesized using an efficient coupling reagent, 2-chloro-1,3-dimethylimidazolidium hexafluorophosphate (CIP).  
IT 101385-69-7  
RL: RCT (Reactant); RACT (Reactant or reagent) (total synthesis of mirabazole B using a chloroimidazolidium peptide coupling reagent)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
) (SCI) (CA INDEX NAME)  
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

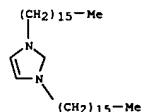


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

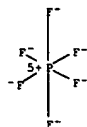
ACCESSION NUMBER: 1997:336152 CAPLUS  
DOCUMENT NUMBER: 127:73378  
TITLE: First example of interdigitated U-shape benzimidazolium ionic liquid crystals  
AUTHOR(S): Lee, Kwang Ming; Lee, Ching Kuan; Lin, Ivan J. B.  
CORPORATE SOURCE: Dep. Chem., Fu-Jen Univ., Taipei, 242, Taiwan  
SOURCE: Chemical Communications (Cambridge) (1997), (9), 899-900  
CODEN: CHCOFS; ISSN: 1359-7345  
PUBLISHER: Royal Society of Chemistry  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Self-assembly of U-shaped 1,3-dialkylbenzimidazolium salts through H bonds and interdigitation of alkylchains produces a bilayer structure with lamellar .alpha. and .beta. mesophases.  
IT 191482-90-3  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process) (properties of interdigitated U-shape ionic liq. crystals formed from hydrogen bonding)  
RN 191482-90-3 CAPLUS  
CN 1H-Imidazolium, 1,3-dihexadecyl-, hexafluorophosphate(1-) (SCI) (CA INDEX NAME)  
CM 1  
CRN 191482-89-0  
CMF C35 H69 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

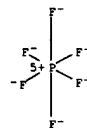
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 41 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

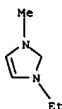
L11 ANSWER 42 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT



L11 ANSWER 43 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1997:305737 CAPLUS  
 DOCUMENT NUMBER: 127:57121  
 TITLE: Nonaqueous electrolytes for electrochemical capacitors: imidazolium cations and inorganic fluorides with organic carbonates  
 AUTHOR(S): McEwen, Alan B.; McDevitt, Stephen F.; Koch, Victor R.  
 CORPORATE SOURCE: Covalent Associates, Incorporated, Woburn, MA, 01801, USA  
 SOURCE: Journal of the Electrochemical Society (1997), 144(4), L84-L86  
 CODEN: JESQAN; ISSN: 0013-4651  
 PUBLISHER: Electrochemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Electrolytes based on 1-ethyl-3-methylimidazolium cation (EMI+) and either the hexafluorophosphate (EMIPF6) or tetrafluoroborate (EMIBF4) anion in org. alkyl carbonate solvents were evaluated for use in electrochem. capacitors. The cond., capacitance, limiting oxidn. and redn. potentials, and thermal stability were assessed. High cond. and capacitance values were found regardless of whether cyclic (high viscosity/high dielec. const.) or acyclic (low viscosity/low dielec. const.) alkyl carbonates were used. The best correlation with cond. for the EMIPF6 salt was found to be the mol. wt. (.kappa. varies. 1/MW) and, to a lesser degree, the viscosity (.kappa. varies. 1/eta.) of the solvent. The high sp. capacitance (130 F/g) and excellent stability (>3.5 V, >130.degree.C) make these electrolytes well suited for use in electrochem. double-layer capacitors.  
 IT 155371-19-09, 1-Ethyl-3-methylimidazolium hexafluorophosphate  
 RI: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (nonaq. electrolytes for electrochem. capacitors contg. imidazolium salts and inorg. fluorides with org. carbonates)  
 RN 155371-19-0 CAPLUS  
 CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 65039-03-4  
 CMF C6 H11 N2



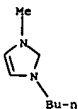
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CM 2

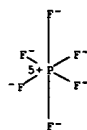
L11 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1997:107368 CAPLUS  
 DOCUMENT NUMBER: 126:119347  
 TITLE: New catalytic composition containing transition metals  
 INVENTOR(S): Chauvin, Yves; Musmann, Lothar; Olivier, Helene  
 PATENT ASSIGNEE(S): Institut Francais Du Pétrole, Fr.  
 SOURCE: Eur. Pat. Appl., 9 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 748653	A1	19961218	EP 1996-401184	19960604 <--
EP 748653	B1	20000126		
R: DE, GB, IT, NL				
FR 2735399	A1	19961220	FR 1995-7328	19950616 <--
FR 2735399	B1	19970725		
JP 09000937	A2	19970107	JP 1996-153761	19960614 <--
US 5852130	A	19981222	US 1996-664539	19960617 <--
US 6040263	A	20000321	US 1998-154402	19980915
PRIORITY APPLN. INFO.:		FR 1995-7328	19950616	
		US 1996-664539	19960617	

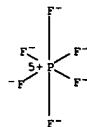
 OTHER SOURCE(S): MARPAT 126:119347  
 AB Unsatd. compds. such as olefins, dienes, acetylene derivs., and arom. compds. are hydrogenated by contacting with a melt of .gtoreq.1 salt composed of quaternary ammonium and(or) phosphonium cations and BF4-, BCl4-, AsF6-, SbF6-, trifluorosulfonate, fluoro-sulfonate, tetrachloroaluminate, dichlorocuprate, or trichlorozincate, and .gtoreq.1 complex of Group VIII in a H atm. The hydrogenation products are insol. or only slightly sol. in the melt so that the products are able to be sepd. from the catalyst by simple decantation. Isomerization of olefins accompanies the hydrogenation.  
 IT 174501-64-5  
 RI: CAT (Catalyst use); USES (Uses) (hydrogenation catalysts contg. salt melts and transition metals complexes for unsatd. compds.)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



L11 ANSWER 43 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 44 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 \*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*  
 CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 45 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:14271 CAPLUS  
DOCUMENT NUMBER: 126:171863  
TITLE: Efficient synthesis of peptaibol using a  
chloroimidazolium coupling reagent, CIP  
AUTHOR(S): Akaji, Kenichi; Tamai, Yasunori; Kiso, Yoshiaki  
CORPORATE SOURCE: Dep. Medicinal Chemistry, Kyoto Pharmaceutical Univ.,  
Kyoto, 607, Japan  
SOURCE: Tetrahedron (1997), 53(2), 567-584  
CODEN: TETRAH; ISSN: 0040-4020  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Two peptaibols, alamethicin F-30 and trichovirin I 4A, have been  
synthesized in soln. by using 2-chloro-1,3-dimethylimidazolium  
hexafluorophosphate (CIP) in the presence of additives  
1-hydroxy-7-azabenzotriazole (HOAT) and  
3-hydroxy-3,4-dihydro-4-oxo-1,2,3-  
benzotriazine (HOBt) as coupling agents and TFA as a final deprotecting  
reagent. Alamethicin F-30 is one of the most common peptaibols and  
consists of 19 amino acids including 8 .alpha., .alpha.-di-Me amino acid  
(.alpha.-aminoisobutyric acid, Aib) and phenylalaninol residues.  
Trichovirin I 4A consists of 13 amino acids including 5 Aib residues and  
leucinol. In the synthesis of both, all couplings including those

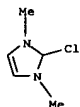
between  
sterically hindered Aib residues were successfully achieved within 60 min  
using the newly developed coupling agents. In the synthesis of  
trichovirin I 4A, no racemization was detected during the CIP-mediated  
coupling of peptide fragments having an optically active .alpha.-amino  
acid at its C-terminus. The synthesis of 2 peptaibols shows that the  
CIP-additive method is efficient not only for the coupling of sterically  
hindered amino acids but also for general fragment coupling.

IT 176088-03-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(efficient synthesis of peptaibols using chloroimidazolium coupling  
reagents)

RN 176088-03-2 CAPLUS  
CN 1H-Imidazolium, 2-chloro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI)  
(CA  
INDEX NAME)

CM 1

CRN 56741-83-4  
CMF C5 H8 C1 N2

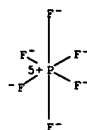


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

L11 ANSWER 45 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CRN 16919-18-9  
CMF F6 P  
CCI CCS



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR  
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L11 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:694146 CAPLUS  
DOCUMENT NUMBER: 125:312338  
TITLE: Silver halide color photographic films having  
improved  
antistatic coatings.  
INVENTOR(S): Tachibana, Noriki; Kotani, Chiaki; Okamura, Shinichi;  
Morita, Seiwa  
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.  
CODEN: JXOXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08211555	A2	19960820	JP 1995-16024	19950202 <--
PRIORITY APPLN. INFO.:			JP 1995-16024	19950202

AB The claimed photog. films has antistatic layer comprising a conjugated  
.pi.-electron system-contg. conductive polymer, an aq. copolyester, a  
crosslinker, and if necessary a specific preservative. The antistatic  
coating compn. has excellent antistatic property, coating

characteristics,  
and storage stability.

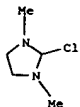
IT 101385-69-7  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)

(crosslinker for antistatic coatings on photog. films)

RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-,  
hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

CM 1

CRN 75126-82-8  
CMF C5 H10 C1 N2

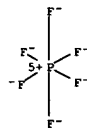


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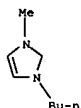
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CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 46 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 47 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:683340 CAPLUS  
 DOCUMENT NUMBER: 126:46733  
 TITLE: Nonaqueous room-temperature ionic liquids: a new class  
 of solvents for catalytic organic reactions  
 AUTHOR(S): Olivier, Helene; Chauvin, Yves  
 CORPORATE SOURCE: Institut Francais du Pétrole, Rueil-Malmaison, 92306, Fr.  
 SOURCE: Chemical Industries (Dekker) (1996), 68(Catalysis of Organic Reactions), 249-263  
 CODEN: CHEIDI; ISSN: 0737-8025  
 PUBLISHER: Dekker  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Room-temp. org.-inorg. ionic liqs. of the BMI+A- type (BMI=1-butyl-3-methylimidazolium, A=Al2Cl7-, AlCl4-, BF4-, PF6- and SbF6-) can be used as a new class of solvents for two-phase catalytic org. reactions. Their chem. and phys. properties can be varied with the nature of the A- anions and they can be fitted to catalyst precursors and reactions involved. These media can stabilize various transition metal complexes and are poorly sol. with hydrocarbons and aldehydes. Thus, the sepn. of the reaction products from the catalyst can be easily achieved by simple decantation. We have deliberately used these media for catalytic reactions of industrial petroleum interest such as dimerization, alkylation, hydrogenation, metathesis, hydroformylation of olefins and cyclodimerization of butadiene. This extends the field of two-phase catalysis to substrates, complexes and ligands which are poorly sol. or unstable in water.  
 IT 174501-64-5  
 RL: MSC (Miscellaneous)  
 (nonaq. room-temp. ionic liq. solvents for catalytic org. reactions)  
 RN 174501-64-5 CAPLUS  
 CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 80432-08-2  
 CMF C8 H15 N2



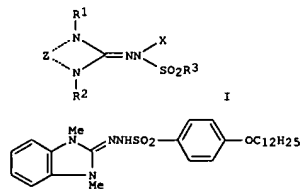
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

L11 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:649269 CAPLUS  
 DOCUMENT NUMBER: 125:288705  
 TITLE: Photographic material and image-forming method  
 INVENTOR(S): Noro, Masaki; Watanabe, Katsuyuki; Okamura, Hisashi; Matsumoto, Kazuhiko  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

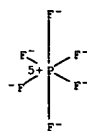
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08202002	A2	19960809	JP 1995-24538	19950120 <--
PRIORITY APPL. INFO.:			JP 1995-24538	19950120
OTHER SOURCE(S):		MARPAT 125:288705		

GI

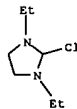


AB Imagewise exposed Ag halide photosensitive materials are processed in the presence of a compd. I [R1, R2, R3 = (substituted) alkyl, (substituted) aryl, (substituted) heterocycle; X = H, acyl, sulfonyl; Z = nonmetal atoms required to form a 5- or 6-membered heterocycle], which becomes an oxidant at the areas where the latent images exist and reacts with couplers to form dye images, to form images. Ag halide photog. materials contg. I are also claimed. Thus, a photothermog. film contg. II as a color developing agent was prepd.  
 IT 182626-19-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of imidazole sulfonylethylhydrazones compd.)  
 RN 182626-19-3 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-1,3-diethyl-4,5-dihydro-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 182626-18-2  
 CMF C7 H14 Cl N2

L11 ANSWER 47 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

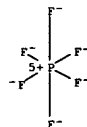


L11 ANSWER 48 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 49 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:605220 CAPLUS  
DOCUMENT NUMBER: 125:225051  
TITLE: Catalyst based on nitrosyliron complex for dimerization of butadiene to form 4-vinylcyclohexene  
INVENTOR(S): Chauvin, Yves; De Souza, Roberto; Olivier, Helene  
PATENT ASSIGNEE(S): Institut Francais Du Petrole, Fr.  
SOURCE: Fr. Demande, 13 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2728180	A1	19960621	FR 1994-15294	19941216 <--
FR 2728180	B1	19970124		

PRIORITY APPLN. INFO.: MARPAT 125:225051  
OTHER SOURCE(S):  
AB A catalyst compn. comprising .gtoreq.1 quaternary ammonium and/or phosphonium salt and .gtoreq.1 nitrosyliron complex contg. zero-valent iron [e.g., prep. by redn. of Fe2(NO)4Cl2] is used to dimerize butadiene with high selectivity to 4-vinylcyclohexene.

IT 174501-64-5  
RL: CAT (Catalyst use); USES (Uses)  
(catalyst; for dimerization of butadiene to vinylcyclohexene)

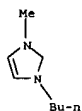
RN 174501-64-5 CAPLUS

CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 80432-08-2

CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

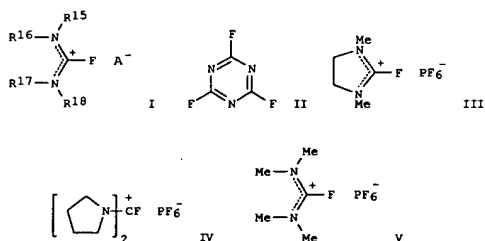
CCI CCS

L11 ANSWER 50 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:377051 CAPLUS  
DOCUMENT NUMBER: 125:59131  
TITLE: Synthesis and use of amino acid fluorides as peptide coupling reagents  
INVENTOR(S): Carpino, Louis A.; El-Faham, Ayman A.  
PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., USA  
SOURCE: PCT Int. Appl., 140 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

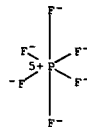
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9604297	A1	19960215	WO 1995-US9528	19950727 <--
W:	AU, CA, JP			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE			
US 5712418	A	19980127	US 1994-284964	19940802 <--
AU 9531520	A1	19960304	AU 1995-31520	19950727 <--
PRIORITY APPLN. INFO.:			US 1994-284964	A 19940802
			US 1989-426121	A2 19891023
			WO 1995-US9528	W 19950727

OTHER SOURCE(S): MARPAT 125:59131  
GI



AB A peptide is prep. by reacting an amino acid BLK-AA(X)-OH (BLK = H or an N-amino protecting group; AA = an amino acid residue; X = H or a protecting group) with a new fluorinating agent, fluoroformamidinium salt (I; R15, R16, R17, R18 = alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl; or NR15R16, NR17R18, or NR15R16 and NR17R18 form a C.g.toreq.10 5- or 6-membered ring contg. a N ring atom and 4-5 ring C atoms; A- = counter ion) and reacting the resulting amino acid fluoride BLK-AA(X)-F with an amino acid or peptide having a free amino group and a protected CO2H group. The fluoroformamidinium salt I is also used as a condensing agent for directly coupling amino acid derivs. in the assembly of peptides. Thus, various protected amino acid fluorides, e.g.

L11 ANSWER 49 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



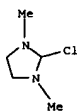
L11 ANSWER 50 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

Fmoc-Gly-F, Fmoc-Ala-F, Fmoc-Val-F, Fmoc-Leu-F, Fmoc-Ile-F, Fmoc-Phe-F, Fmoc-Trp-F, Fmoc-Ser(tBu)-F, Fmoc-Thr(tBu)-OH, Fmoc-Lys(Boc)-F, and Fmoc-Asp(OtBu)-F, were prep. by reacting the corresponding protected amino acids with cyanuric fluoride (II) (prepn. given) or a fluoroformamidinium salt, e.g. 1,3-dimethyl-2-fluoroimidazolium hexafluorophosphate (III) (prepn. given), bis(tetramethylene)fluoroformamidinium hexafluorophosphate (IV) (prepn. given), or tetramethylfluoroformamidinium hexafluorophosphate (V) (prepn. given). A mixt. of 0.5 mmol H-Ala-OMe.HCl and 1.5 mmol Na2CO3 in 10 mL CH2Cl2 and 5 mL H2O was added to 0.6 mmol Fmoc-Phe-F in 5 mL CH2Cl2 and stirred at room temp. for 30 min to give 87.3% Fmoc-Phe-Ala-OMe. For direct coupling reaction, a soln. of 0.75 mmol V in 5 mL CH2Cl2 was added to 0.5 mmol Fmoc-Phe-OH and 0.5 mmol H-Ala-OMe.HCl in 10 mL CH2Cl2 and 5 mL H2O contg. 1.5 mmol Na2CO3 and stirred at room temp. for 1 h to give 87.3% Fmoc-Phe-Ala-OMe. Larger peptides, e.g. leucine enkephalin, H-Tyr-Gly-Gly-Phe-Leu-OH, was also prep. by the two-phase soln. method involving direct coupling of H-Leu-OtBu.HCl with Fmoc-Phe-OH, Fmoc-Gly-OH, and Fmoc-Tyr(OtBu)-OH, using V as the condensing agent.  
IT 101385-69-7, 1,3-Dimethyl-2-chloroimidazolium hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis and use of amino acid fluorides as peptide coupling reagents and fluoroformamidinium salt as fluorinating or condensing agent)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 75126-82-8

CMF C5 H10 Cl N2



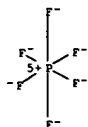
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9

CMF F6 P

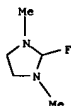
CCI CCS



IT 164298-27-5P, 1,3-Dimethyl-2-fluoroimidazolium hexafluorophosphate  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (synthesis and use of amino acid fluorides as peptide coupling  
 reagents and fluoroformamidinium salt as fluorinating or condensing agent)  
 RN 164298-27-5 CAPLUS  
 CN 1H-Imidazolium, 2-fluoro-4,5-dihydro-1,3-dimethyl-,  
 hexafluorophosphate(1-  
 ) (9CI) (CA INDEX NAME)

CM 1

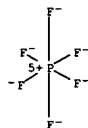
CRN 164298-26-4  
 CMF C5 H10 F N2



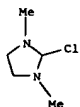
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



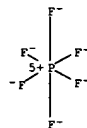
L11 ANSWER 51 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:285949 CAPLUS  
 DOCUMENT NUMBER: 125:34106  
 TITLE: Efficient synthesis of alamethicin using a newly  
 developed coupling reagent, CIP  
 AUTHOR(S): Akaji, Kenichi; Tamai, Yasunori; Kiso, Yoshiaki  
 CORPORATE SOURCE: Department Medicinal Chemistry, Kyoto Pharmaceutical  
 University, Kyoto, 607, Japan  
 SOURCE: Peptide Chemistry (1996), Volume Date 1995,  
 33rd, 121-124  
 CODEN: PECHDP; ISSN: 0388-3698  
 PUBLISHER: Protein Research Foundation  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A symposium report on the soln. synthesis of alamethicin F-30 using  
 2-chloro-1,3-dimethylimidazolidium hexafluorophosphate (CIP) and  
 additives  
 as coupling agents and trifluoroacetic acid (TFA) as a final deprotecting  
 reagent. All couplings including those between sterically hindered  
 .alpha.,.alpha.-di-Me amino acids were successfully achieved by the 60  
 min  
 reaction.  
 IT 101385-69-7P, 2-Chloro-1,3-dimethylimidazolidium  
 hexafluorophosphate  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (efficient synthesis of alamethicin using chlorodimethylimidazolium  
 hexafluorophosphate as a coupling reagent)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-,  
 hexafluorophosphate(1-  
 ) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

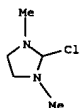
CM 2

CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 52 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:285927 CAPLUS  
 DOCUMENT NUMBER: 125:34096  
 TITLE: Efficient coupling of dialkyl amino acid using a chloro imidazolium reagent, CIP  
 AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Tamai, Yasunori; Kiso, Yoshiaki  
 CORPORATE SOURCE: Department Medicinal Chemistry, Kyoto Pharmaceutical University, Kyoto, 607, Japan  
 SOURCE: Peptide Chemistry (1996), Volume Date 1995, 33rd, 33-36  
 CODEN: PECHDP; ISSN: 0388-3698  
 PUBLISHER: Protein Research Foundation  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A symposium report on the use of 2-chloro-1,3-dimethylimidazolium hexafluorophosphate (CIP) as an efficient coupling agent for N.alpha.-protected .alpha.,.alpha.-dialkyl amino acids in the presence of an additive. The reactivity was enhanced markedly by a catalytic amt. of additive in the order of HOAt.apprx.HODhbt>DMAP>HOBt. The usefulness of the coupling agent was shown by the convergent synthesis of (-)-mirabazone  
 C.  
 IT 101385-69-7, 2-Chloro-1,3-dimethylimidazolium hexafluorophosphate  
 RL: RCT (Reactant); RACT (Reactant or reagent) (efficient peptide coupling of dialkyl amino acids using a chloroimidazolium reagent)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 ) (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

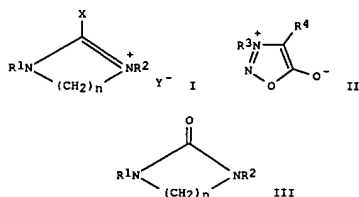
CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

L11 ANSWER 53 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:271125 CAPLUS  
 DOCUMENT NUMBER: 124:317175  
 TITLE: Method for producing sydnone derivatives by cyclization of N-nitroso-.alpha.-amino acids  
 INVENTOR(S): Isobe, Toshio  
 PATENT ASSIGNEE(S): Shiratori Pharm, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08012658	A2	19960116	JP 1994-144392	19940627 <--
PRIORITY APPLN. INFO.:			JP 1994-144392	19940627
OTHER SOURCE(S):		CASREACT 124:317175; MARPAT 124:317175		

GI

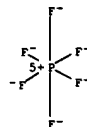


AB N-nitroso-.alpha.-amino acids R3N(NO)CHR4CO2H (R3, R4 = H, org. group) are cyclized using haloiminium salts (I; R1, R2 = alkyl; X = halo; Y = halo, hexafluorophosphate; n = 2,3) as dehydrating agents to give sydnones (II; R3, R4 = same as above), useful as drugs (no data), and imidazolidinones or 3,4,5,6-tetrahydropyrimidinones (III; R1, R2, n = same as above).

This process efficiently gives sydnones under mild and nearly neutral conditions in a short reaction time. Thus, 1.6 g N-nitroso-N-phenylglycine and 3.0 g 2-chloro-1,3-dimethylimidazolium hexafluorophosphate in CH2Cl2 was treated with 2.2 g Et3N and the resulting mixt. was stirred at room temp. for 17 min to give 100% 3-phenylsydnone. Similarly 3-benzyl-4-methylsydnone was obtained in 55% yield from N-benzyl-N-nitrosoalanine and 2-chloro-1,3-dimethylimidazolium chloride.

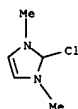
IT 176088-03-2, 2-Chloro-1,3-dimethylimidazolium hexafluorophosphate  
 RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of sydnone deriva. by cyclization of N-nitroso-.alpha.-amino acids with haloiminium salts)  
 RN 176088-03-2 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-1,3-dimethyl-, hexafluorophosphate(1-)  
 (CA

L11 ANSWER 52 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



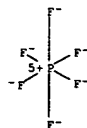
L11 ANSWER 53 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

INDEX NAME)  
 CH 1  
 CRN 56741-83-4  
 CMF C5 H8 Cl N2



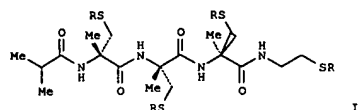
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 54 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:259860 CAPLUS  
DOCUMENT NUMBER: 125:33929  
TITLE: Convergent synthesis of (-)-mirabazone C using a chloroimidazolidium coupling reagent, CIP  
AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Kiso, Yoshiaki  
CORPORATE SOURCE: Department of Medicinal Chemistry, Kyoto  
Pharmaceutical University, Kyoto, 607, Japan  
SOURCE: Journal of Organic Chemistry (1996), 61(10),  
3350-7  
CODEN: JOCEAH; ISSN: 0022-3263  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 125:33929  
GI

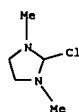


AB A convergent synthesis of (-)-mirabazone C, a tetra thiazoline/thiazole alkaloid isolated from blue-green alga, was described. The successive thiazoline rings of (-)-mirabazone C were formed by a single-step cyclization mediated by TiCl<sub>4</sub> treatment of tripeptide amide (I: R = H). Convergent synthesis of the key intermediate 1 (R = benzyl) derived from three 2-methylcysteine residues was first achieved using a newly developed coupling reagent, 2-chloro-1,3-dimethylimidazolidium hexafluorophosphate (CIP). The effectiveness of CIP for the coupling of .alpha.,.alpha.-dialkyl amino acids and the reaction pathway of the activation was clarified by the syntheses of model peptides contg. an .alpha.,.alpha.-dimethylamino acid. A practical method of asym.

synthesis of 2-methylcysteine by alkylation of cis-3-carbobenzoyloxy-4-methyl-2-phenyloxazolidinone was also described.  
IT 101385-69-7, 2-Chloro-1,3-dimethylimidazolidium hexafluorophosphate  
RL: CAT (Catalyst use); USES (Uses)  
(convergent synthesis of (-)-mirabazone C using a chloroimidazolidium coupling reagent, 2-chloro-1,3-dimethylimidazolidium hexafluorophosphate)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

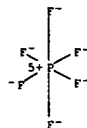
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

L11 ANSWER 54 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



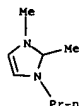
L11 ANSWER 55 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:215355 CAPLUS  
DOCUMENT NUMBER: 124:300857  
TITLE: The intrinsic anodic stability of several anions comprising solvent-free ionic liquids  
AUTHOR(S): Koch, V. R.; Dominey, L. A.; Nanjundiah, C.; Ondrechen, M. J.  
CORPORATE SOURCE: Covalent Associates, Inc., Woburn, MA, 01801, USA  
SOURCE: Journal of the Electrochemical Society (1996), 143(3), 798-803  
CODEN: JESQAN; ISSN: 0013-4651  
PUBLISHER: Electrochemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Salts of the form 1,2-dimethyl-3-propylimidazolium X [where X = AsF<sub>6</sub><sup>-</sup>, PF<sub>6</sub><sup>-</sup>, (CF<sub>3</sub>SO<sub>2</sub>)<sub>2</sub>N<sup>-</sup>, and (CF<sub>3</sub>SO<sub>2</sub>)<sub>3</sub>C<sup>-</sup>] were prepd. and purified. Linear sweep voltammetry was conducted at 80.degrees., a temp. at which all four salts were molten, at Pt, W, and glassy C working electrodes. The intrinsic anodic stability of these anions was in the order (CF<sub>3</sub>SO<sub>2</sub>)<sub>3</sub>C<sup>-</sup> > (CF<sub>3</sub>SO<sub>2</sub>)<sub>2</sub>N<sup>-</sup> approx. AsF<sub>6</sub><sup>-</sup> > PF<sub>6</sub><sup>-</sup>. These exptl. soln.-phase oxidn. potentials correlated well with gas-phase HOMO energies calcd. by an ab initio technique.

IT 157310-73-1, 1,2-Dimethyl-3-propylimidazolium hexafluorophosphate  
RL: PRP (Properties)  
(intrinsic anodic stability of several anions comprising solvent-free ionic liqqs.)  
RN 157310-73-1 CAPLUS  
CN 1H-Imidazolium, 1,2-dimethyl-3-propyl-, hexafluorophosphate(1-) (9CI)  
(CA INDEX NAME)

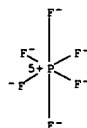
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CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

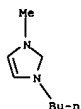
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 55 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 56 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

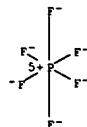
ACCESSION NUMBER: 1996:80878 CAPLUS  
DOCUMENT NUMBER: 124:218458  
TITLE: The use of new ionic liquids in two-phase catalytic hydrogenation reaction by rhodium complexes  
AUTHOR(S): Suarez, Paulo A. Z.; Dullius, Jeane E. L.; Einloft, Sandra; De Souza, Roberto F.; Dupont, Jairton  
CORPORATE SOURCE: Inst. Quim., UFRGS, Porto Alegre, 91501-970, Brazil  
SOURCE: Polyhedron (1996), 15(7), 1217-19  
CODEN: PLYHDE; ISSN: 0277-5387  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The reaction of 1-n-butyl-3-methylimidazolium chloride (BMIC) with Na tetrafluoroborate or NaPF<sub>6</sub> produced the room temp., air- and H<sub>2</sub>O-stable molten salts (BMI<sup>+</sup>)(BF<sub>4</sub><sup>-</sup>) (1) and (BMI<sup>+</sup>)(PF<sub>6</sub><sup>-</sup>) (2), resp., in almost quant. yield. The Rh complexes RhCl(PPh<sub>3</sub>)<sub>3</sub> and [Rh(cod)2](BF<sub>4</sub>) are completely sol. in these ionic liqs. and they are able to catalyze the hydrogenation of cyclohexene at 10 atm and 25.degree. in a typical two-phase catalysis with turnovers up to 6000.  
IT 174501-64-5P  
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(prepn. and use as solvent in 2-phase catalytic hydrogenation reaction by rhodium complexes)  
RN 174501-64-5 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 80432-08-2  
CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

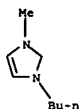
CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 56 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 57 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

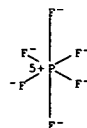
ACCESSION NUMBER: 1996:48110 CAPLUS  
DOCUMENT NUMBER: 124:231445  
TITLE: A novel class of versatile solvents for two-phase catalysis: hydrogenation, isomerization, and hydroformylation of alkenes catalyzed by rhodium complexes in liquid 1,3-dialkylimidazolium salts  
AUTHOR(S): Chauvin, Yves; Mussmann, Lothar; Olivier, Helene  
CORPORATE SOURCE: Inst. Francais Petrole, Rueil-Malmaison, F-92506, Fr.  
SOURCE: Angewandte Chemie, International Edition in English (1996), Volume Date 1995, 34(23/24), 2698-700  
CODEN: ACIEAY; ISSN: 0570-0833  
PUBLISHER: VCH  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 124:231445  
AB The room temp. ionic liqs. based on 1-butyl-3-methylimidazolium (BMI<sup>+</sup>) salts were used as monad. solvents for the Rh-catalyzed ([Rh(nbd)(PPh<sub>3</sub>)<sub>2</sub>](PF<sub>6</sub>) 2-phase hydrogenation, isomerization and hydroformylation of unsatd. substrates. Remarkable solvent effects were obsd. for the hydrogenation of 1-pentene. When BMI<sup>+</sup>SbF<sub>6</sub><sup>-</sup> was used, hydrogenation rates were nearly 5 times higher than when Me<sub>2</sub>CO was used. When BMI<sup>+</sup>Cl<sup>-</sup> was used the isomerization to cis-2-pentene was obtained with a selectivity of 98%. The hydrogenation of 1,3-cyclohexadiene and 2-methyl-1,3-butadiene in the presence of [Rh(nbd)(dppe)] or [Rh(nbd)(PPh<sub>3</sub>)<sub>2</sub>](PF<sub>6</sub>) and of alpha.-acetamidocinnamic acid in presence of [Rh(cod)](-)-diop)]PF<sub>6</sub> was also studied. The hydroformylation of 1-pentene to hexanals was studied using [Rh(CO)2(acac)] in the presence of PPh<sub>3</sub> and Na salts of monosulfonated and trisulfonated triphenylphosphine.  
IT 174501-64-5  
RL: NUU (Other use, unclassified); USES (Uses)  
(hydrogenation, isomerization, and hydroformylation of alkenes catalyzed by rhodium complexes in liq. 1,3-dialkylimidazolium salts)  
RN 174501-64-5 CAPLUS  
CN 1H-Imidazolium, 1-butyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
CM 1  
CRN 80432-08-2  
CMF C8 H15 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P

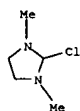
L11 ANSWER 57 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)





L11 ANSWER 58 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:5414 CAPLUS  
DOCUMENT NUMBER: 124:117976  
TITLE: Efficient synthesis of alamethicin F-30 using a  
chloro imidazolium coupling reagent, CIP  
AUTHOR(S): Akaji, Kenichi; Tamai, Yasunori; Kiso, Yoshiaki  
CORPORATE SOURCE: Dep. Medicinal Chem., Kyoto Pharmaceutical Univ.,  
Kyoto, 607, Japan  
SOURCE: Tetrahedron Letters (1995), 36(51), 9341-4  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Alamethicin F-30 has been synthesized in soln. using a CIP-additive (CIP  
= 2-chloro-1,3-dimethylimidazolium hexafluorophosphate) as a coupling  
agent and TFA as a final deprotecting reagent. All couplings including  
those between sterically hindered .alpha.-aminoisobutyric acid were  
successfully achieved by a 60 min reaction.  
IT 101385-69-7, 2-Chloro-1,3-dimethylimidazolium  
hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(efficient synthesis of alamethicin F-30 using  
chlorodimethylimidazolium hexafluorophosphate as a coupling reagent)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-,  
hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)  
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

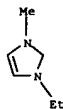


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 59 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

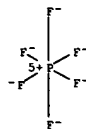
ACCESSION NUMBER: 1995:973291 CAPLUS  
DOCUMENT NUMBER: 124:61432  
TITLE: Dual intercalating molten electrolyte batteries  
AUTHOR(S): Carlin, R. T.; De Long, H. C.; Fuller, J.;  
Lauderdale, W. J.; Naughton, T.; Trulove, P. C.; Bahn, C. S.  
CORPORATE SOURCE: Frank J. Seiler Research Laboratory, US Air Force  
Academy, CO, 80840-6272, USA  
SOURCE: Materials Research Society Symposium Proceedings ( 1995), 393 (Materials for Electrochemical  
Energy Storage and Conversion-Batteries, Capacitors  
and Fuel Cells), 201-6  
CODEN: MRSPDH; ISSN: 0272-9172  
PUBLISHER: Materials Research Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Dual intercalating molten electrolyte electrodes and cells were examd.  
using a no. of low-melting and room-temp. molten salts. A cell with a  
chloroaluminate melt achieved a cycling efficiency of 85% with a  
discharge voltage of 2.92 V. Coke-elastomer composite electrodes underwent cation  
reductive intercalation without experiencing the exfoliation and degradn.  
seen for graphite rods. Theor. studies for an imidazolium-graphite  
intercalate predict the graphite layer spacing expands 5.18-8.01 .ANG.  
upon insertion of the imidazolium mol. into the graphite lattice.  
IT 155371-19-0  
RL: DEV (Device component use); USES (Uses)  
(performance of batteries with dual intercalating molten electrolyte  
of)  
RN 155371-19-0 CAPLUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA  
INDEX NAME)  
CM 1  
CRN 65039-03-4  
CMF C6 H11 N2



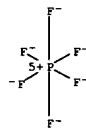
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 58 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 59 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 60 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1995:785005 CAPLUS  
DOCUMENT NUMBER: 123:185734  
TITLE: Electrolyte solution and electrochemical elements using it  
INVENTOR(S): Shiono, Katsuji; Nitta, Yukihiro  
PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan  
SOURCE: PCT Int. Appl., 30 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9515572	A1	19950608	WO 1994-JP2028	19941202 <--
W: CN, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 684620	A1	19951129	EP 1995-902292	19941202 <--
EP 684620	B1	20030604		
R: DE, FR, GB, NL				
CN 1117323	A	19960221	CN 1994-191092	19941202 <--
CN 1039264	B	19980722		

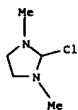
PRIORITY APPLN. INFO.: JP 1993-339270 A 19931203  
JP 1994-152734 A 19940609  
WO 1994-JP2028 W 19941202

OTHER SOURCE(S): MARPAT 123:185734  
AB An electrolyte soln. in which the solute is a salt of a quaternized deriv. of an N,N,N'-trisubstituted amidine compd. with a carboxylic or like acid, the amidine compd. being exemplified by 1-methylimidazole, 1-methylbenzimidazole, 1,2-dimethylimidazoline, 1,2-dimethyl-1,4,5,6-tetrahydropyrimidine, 1,8-diazabicyclo[5.4.0]undecene-7, or 1,5-diazabicyclo[4.3.0]nonene-5, is described. An electrochem. element and an electrolytic capacitor can be prepd. from the electrolyte soln. The electrolytic capacitor and electrochem. element, such as an electrochromic display element, are excellent in the thermal stability of the electrolyte soln., have a high specific cond., and neither corrode nor deteriorate metals, resins, or rubbers.  
IT 137603-23-7  
RL: TEM (Technical or engineered material use); USES (Uses) (electrolyte soln. for electrolytic capacitors)  
RN 137603-23-7 CAPLUS  
CN 1H-Imidazolium, 4,5-dihydro-1,2,3-trimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1  
CRN 69894-09-3  
CMF C6 H13 N2

L11 ANSWER 61 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1995:553995 CAPLUS  
DOCUMENT NUMBER: 123:33634  
TITLE: Tetramethylfluoroformamidinium Hexafluorophosphate: A Rapid-Acting Peptide Coupling Reagent for Solution and Solid Phase Peptide Synthesis  
AUTHOR(S): Carpino, Louis A.; El-Faham, Ayman  
CORPORATE SOURCE: Department of Chemistry, University of Massachusetts, Amherst, MA, 01003-4510, USA  
SOURCE: Journal of the American Chemical Society (1995), 117(19), 5401-2  
CODEN: JACSAT; ISSN: 0002-7863  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Tetramethylfluoroformamidinium hexafluorophosphate, (Me2N)2C=F PF6- 2, easily synthesized from the readily available chloro analog (Me2N)2C=Cl PF6-, has been shown to convert protected amino acids into their amino acid fluorides which may be isolated, if desired. In addn., 2 can be used in situ as a coupling reagent. Because of the transient intermediacy of the acid fluorides, soln. and solid phase peptide coupling takes place even in the case of hindered amino acids for which reagents such as BOP and N-([1H-benzotriazol-1-yl] (dimethylamino)methylene)-N-methylmethaniminium hexafluorophosphate N-oxide (HBTU) are ineffective. Efficient automated syntheses of several oligopeptides are reported including systems incorporating the difficult Aib-Aib coupling. Reagent 2 is also suitable in segment coupling by the simple expedient of adding an equiv. of 1-hydroxy-7-azabenzotriazole (HQA) to the reaction mixt.  
IT 101385-69-7  
RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of tetramethylfluoroformamidinium hexafluorophosphate as soln. and solid phase peptide coupling reagent)  
RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

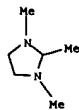
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

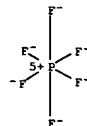
CM 2  
CRN 16919-18-9

L11 ANSWER 60 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



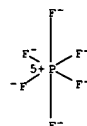
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



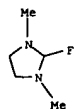
L11 ANSWER 61 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CMF F6 P  
CCI CCS



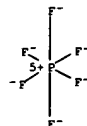
IT 164298-27-59  
RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of tetramethylfluoroformamidinium hexafluorophosphate as soln. and solid phase peptide coupling reagent)  
RN 164298-27-5 CAPLUS  
CN 1H-Imidazolium, 2-fluoro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1  
CRN 164298-26-4  
CMF C5 H10 F N2



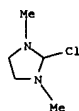
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



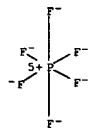
L11 ANSWER 62 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1995:498326 CAPLUS  
 DOCUMENT NUMBER: 122:251969  
 TITLE: Antistatic silver halide photographic material  
 INVENTOR(S): Tachibana, Noriki; Morita, Seiwa  
 PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.  
 CODEN: JKOXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06301154	A2	19941028	JP 1993-87395	19930414 <--
PRIORITY APPLN. INFO.:			JP 1993-87395	19930414
AB	In the title Ag halide photog. material utilizing .gtoreq. 1 antistatic layers contg. an electronically conductive polymer, the above polymer is crosslinked with a crosslinking agent selected from an epoxy-, aldehyde-, reactive ethylene-, ethyleneimine-, reactive ester-type material.			
IT	101385-69-7 RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses) (crosslinking agent; for antistatic photog. film polymer layer)			
RN	101385-69-7 CAPLUS			
CN	1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) ) (SCI) (CA INDEX NAME)			
CM	1			
CRN	75126-82-8			
CMF	C5 H10 Cl N2			

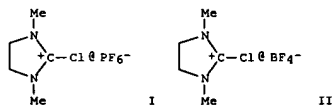


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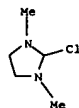
CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 63 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:681149 CAPLUS  
 DOCUMENT NUMBER: 121:281149  
 TITLE: CIP and CIB: two new reagents for the esterification or difficult coupling of sterically hindered amino acids  
 AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Kimura, Tooru; Fujiwara, Yoichi; Kiso, Yoshiaki  
 CORPORATE SOURCE: Department of Medicinal Chemistry, Kyoto Pharmaceutical University, Kyoto, 607, Japan  
 SOURCE: Rept. 1992, Proc. Eur. Pept. Symp., 22nd (1993), Meeting Date 1992, 220-1. Editor(s): Schneider, Conrad H.; Eberle, Alex N. ESCOM: Leiden, Neth.  
 CODEN: 60LUAN  
 CONFERENCE: Conference  
 LANGUAGE: English  
 GI



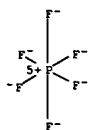
AB A symposium report on the prepn. of CIP (I) and CIB (II) as reagents for esterification or coupling of sterically hindered amino acids, e.g. Alb.  
 IT 101385-69-7P  
 RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
 (CIP and CIB as new reagents for esterification or peptide coupling of sterically hindered amino acids)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 ) (SCI) (CA INDEX NAME)  
 CM 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



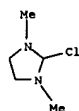
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

L11 ANSWER 63 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



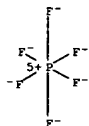
L11 ANSWER 64 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:605991 CAPLUS  
 DOCUMENT NUMBER: 121:205991  
 TITLE: Efficient coupling of .alpha..alpha.-dimethyl amino acid using a new chloro imidazolidium reagent, CIP  
 AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Kiso, Yoshiaki  
 CORPORATE SOURCE: Dep. Med. Chem., Kyoto Pharm. Univ., Kyoto, 607, Japan  
 SOURCE: Tetrahedron Letters (1994), 35(20), 3315-18  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB CIP (2-chloro-1,3-dimethylimidazolidium hexafluorophosphate) was an efficient coupling agent for N.alpha.-protected .alpha.-aminoisobutyric acid (Aib) in the presence of an additive. The reactivity was enhanced markedly by a catalytic amt. of additive in the order of 1-hydroxy-7-azabenzotriazole (HOAT) .apprx. 3-hydroxy-3,4-dihydro-4-oxo-1,2,3-benzotriazine (HODhbt) > 4-(dimethylamino)pyridine (DMAP) > 1-hydroxybenzotriazole (HOBt). These couplings occurred without detectable racemization.  
 IT 101385-69-7, 2-Chloro-1,3-dimethylimidazolidium hexafluorophosphate  
 RL: RCT (Reactant); RACT (Reactant or reagent) (agent, for coupling of .alpha.-aminoisobutyric acid derivs., effect of additives on)  
 RN 101385-69-7 CAPLUS  
 CN 1H-imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



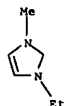
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

L11 ANSWER 64 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



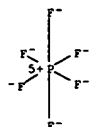
L11 ANSWER 65 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1994:537488 CAPLUS  
 DOCUMENT NUMBER: 121:137488  
 TITLE: Dual intercalating molten electrolyte batteries  
 AUTHOR(S): Carlin, Richard T.; De Long, Hugh C.; Fuller, Joan; Trulove, Paul C.  
 CORPORATE SOURCE: Frank J. Seiler Research Lab., United State Air Force Academy, CO, 80840-6272, USA  
 SOURCE: Journal of the Electrochemical Society (1994), 141(7), L73-L76  
 CODEN: JESQAN; ISSN: 0013-4651  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB The reductive and oxidative intercalation of ions into graphite from room- and low-temp. molten salts was demonstrated. The molten salts used 1-ethyl-3-methylimidazolium (EMI+) or 1,2-dimethyl-3-propylimidazolium (DMPi+) as the cation and AlCl4-, BF4-, PF6-, CP3SO3-, or PhCO2- as the anion. In a 2-electrode battery configuration, the molten salt electrolyte provides both the cation and anion, which are intercalated into the graphite anode and cathode, resp. A battery using a (DMPi)(AlCl4) electrolyte and 2 graphite rod electrodes achieved an open-circuit voltage of 3.5 V and a cycling efficiency of 85%.  
 IT 155371-19-0 157310-73-1  
 RL: USES (Uses) (battery electrolyte, dual-intercalating)  
 RN 155371-19-0 CAPLUS  
 CN 1H-imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 65039-03-4  
 CMF C6 H11 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

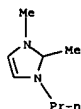
L11 ANSWER 65 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



RN 157310-73-1 CAPLUS  
CN 1H-Imidazolium, 1,2-dimethyl-3-propyl-, hexafluorophosphate(1-) (9CI)  
(CA INDEX NAME)

CM 1

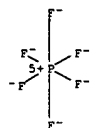
CRN 157310-70-8  
CMF C8 H15 N2



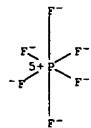
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS



L11 ANSWER 66 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 66 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1994:312341 CAPLUS  
DOCUMENT NUMBER: 120:312341  
TITLE: Structure of 1-ethyl-3-methylimidazolium hexafluorophosphate: model for room temperature

molten

AUTHOR(S): Fuller, Joan; Carlin, Richard T.; De Long, Hugh C.;  
Haworth, Dustin  
CORPORATE SOURCE: Frank J. Seiler Res. Lab., United States Air Force  
Academy, CO, 80840, USA  
SOURCE: Journal of the Chemical Society, Chemical  
Communications (1994), (3), 299-300  
CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE:  
LANGUAGE: English

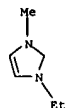
AB The title compd. is monoclinic, space group P21/c, with a 8.757(2), b 9.343(2), c 13.701(3) .ANG., and .beta. 103.05(3).degree.; Z = 4, dc = 1.558; R = 0.065 for 1194 reflections. The crystal structure of 1-ethyl-3-methylimidazolium (EMI+) hexafluorophosphate consists of interionic interactions dominated by cation-anion coulombic forces with minimal H bonding and serves as a model for EMI+ room temp. molten salts contg. weakly complexing anions. (EMI+)(BF4-) was synthesized using a modified prepn. to produce large quantities of this room temp. melt for phys. characterization.

IT 155371-19-0P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(prepn. and crystal structure of, as model for room temp. molten salts)

RN 155371-19-0 CAPLUS  
CN 1H-Imidazolium, 1-ethyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 65039-03-4  
CMF C6 H11 N2

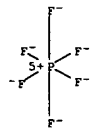


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

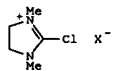
CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 67 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 67 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1994:271120 CAPLUS  
DOCUMENT NUMBER: 120:271120  
TITLE: Two new reagents for the coupling of sterically hindered amino acids  
AUTHOR(S): Akaji, Kenichi; Fujino, Kenji; Kuriyama, Naohiro;  
Kimura, Toru; Kiso, Yoshiaki  
CORPORATE SOURCE: Dep. Med. Chem., Kyoto Pharm. Univ., Kyoto, 607, Japan  
SOURCE: Pept. Chem. 1992, Proc. Jpn. Symp., 2nd (1993\*\*\*), Meeting Date 1992, 51-3. Editor(s): Yanaihara, Noboru. ESCOM: Leiden, Neth.  
CODEN: 59NTAC  
DOCUMENT TYPE: Conference  
LANGUAGE: English



AB A report from a symposium on the prepn. and use of chloroimidazolium salts I (X = PF6, BF4) for peptide couplings of hindered amino acids.

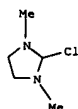
IT \*\*\*101385-69-7, 2-Chloro-1,3-dimethylimidazolium hexafluorophosphate

RL: RCT (Reactant); RACT (Reactant or reagent)  
(agent, for peptide coupling of hindered amino acids)

RN 101385-69-7 CAPLUS  
CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

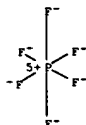
CRN 75126-82-8  
CMF C5 H10 Cl N2



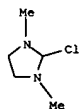
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

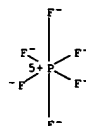


L11 ANSWER 68 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1993:148015 CAPLUS  
 DOCUMENT NUMBER: 118:148015  
 TITLE: Efficient solid phase peptide synthesis. Use of methanesulfonic acid .alpha.-amino deprotecting procedure and new coupling reagent, 2-(benzotriazol-1-yl)oxy-1,3-dimethylimidazolidinium hexafluorophosphate (BOI)  
 AUTHOR(S): Kiso, Yoshiaki; Fujiwara, Yoichi; Kimura, Tooru; Nishitani, Akiko; Akaji, Kenichi  
 CORPORATE SOURCE: Dep. Med. Chem., Kyoto Pharm. Univ., Kyoto, Japan  
 SOURCE: International Journal of Peptide & Protein Research (1992), 40(3-4), 308-14  
 CODEN: IJPPC3; ISSN: 0367-8377  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB An efficient method for solid phase peptide synthesis was developed, which consists of N.alpha.-selective deprotection by dil. methanesulfonic acid, in situ neutralization and rapid coupling reaction using benzotriazol-1-yloxytris(dimethylamino)phosphonium hexafluorophosphate (BOP) or 2-(benzotriazol-1-yl)oxy-1,3-dimethylimidazolidinium hexafluorophosphate (BOI) reagent. Selective removal of the N.alpha.-tert-butoxycarbonyl group by dil. methanesulfonic acid was of more advantage than removal by trifluoroacetic acid in terms of stability of semipermanent protecting groups and suppression of undesired side reactions. The use of in situ neutralization and rapid coupling method reduced intramol. aminolytic cyclization by shortening exposure of the deprotected nucleophilic amino group. A successful synthesis of porcine brain natriuretic peptide (pBNP) (I) has been achieved using this efficient solid phase peptide synthesis scheme.  
 IT 101385-69-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with hydroxybenzotriazole)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2

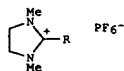


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CH 2  
 CRN 16919-18-9



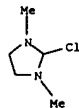
L11 ANSWER 69 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:490721 CAPLUS  
 DOCUMENT NUMBER: 117:90721  
 TITLE: Anchoring of Fmoc amino acid to 4-alkoxybenzyl alcohol resin using a new esterification reagent  
 AUTHOR(S): Akaji, Kenichi; Kuriyama, Naohiro; Kimura, Tooru; Fujiwara, Yoichi; Kiso, Yoshiaki  
 CORPORATE SOURCE: Dep. Med. Chem., Kyoto Pharm. Univ., Kyoto, 607, Japan  
 SOURCE: Tetrahedron Letters (1992), 33(22), 3177-80  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Esterification of 9-fluorenylmethoxycarbonyl (Fmoc) amino acids or amino acid derivs. to 4-alkoxybenzylalc. resin was achieved in generally good yield using new 1,3-dimethylimidazolidinium esterification reagents I [R

= Cl (CIP); 1-benzotriazolylloxy (BOI)]. The reaction was faster with the same or lower racemization level than the anchoring reaction using the conventional esterification reagents.

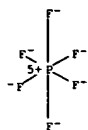
IT 101385-69-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (agent, for esterification of (fluorenylmethoxycarbonyl)amino acids to alkoxybenzyl resin, racemization in)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)  
 CH 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2



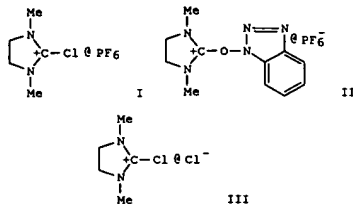
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CH 2

L11 ANSWER 69 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS

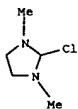


L11 ANSWER 70 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1992:470300 CAPLUS  
 DOCUMENT NUMBER: 117:70300  
 TITLE: Anchoring of Fmoc amino acids to 4-alkoxybenzyl alcohol resin using new esterification reagents  
 AUTHOR(S): Akaji, Kenichi; Kuriyama, Masahito; Kimura, Tooru; Fujiwara, Yoichi; Kiso, Yoshiaki  
 CORPORATE SOURCE: Dep. Med. Chem., Kyoto Pharm. Univ., Kyoto, 607, Japan  
 SOURCE: Peptide Chemistry (1992), Volume Date 1991, 29th, 193-6  
 CODEN: PECHDP; ISSN: 0388-3698  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



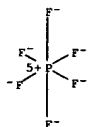
AB A symposium report on the anchoring of 9-fluorenylmethoxycarbonyl (Fmoc) amino acids to 4-alkoxybenzyl alc. resin by new esterification reagents I and II with good anchoring yields and no significant racemization. I was prepd. from chloride III, and II was prepd. by treating I with 1-hydroxybenzotriazole. Fmoc-X-OH (X = Ala, Leu) were anchored to the title resin by I, whereas Fmoc-X-OH (X = Val, Phe, His(Bum), Asp(OCMe3), Glu(OCMe3), Thr(CMe3), Lys(COCMe3)) were anchored to the title resin by both I and II.  
 IT 101385-69-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as esterification reagent for anchoring fluorenylmethoxycarbonyl amino acids to alkoxybenzyl alc. resin)  
 RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 75126-82-8  
 CMF C5 H10 Cl N2

L11 ANSWER 70 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

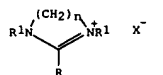


\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

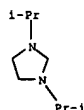
CM 2  
 CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 71 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:679975 CAPLUS  
 DOCUMENT NUMBER: 115:279975  
 TITLE: One-pot synthesis of cyclic amidinium tetrafluoroborates and hexafluorophosphates: the simplest models of N5,N10-methenyltetrahydrofolate coenzyme  
 AUTHOR(S): Saba, Shahrokh; Brescia, Anne Marie; Kaloustian, Moses  
 CORPORATE SOURCE: K.  
 SOURCE: Dep. Chem., Fordham Univ., Bronx, NY, 10458, USA  
 Tetrahedron Letters (1991), 32(38), 5031-4  
 CODEN: TELEAY; ISSN: 0040-4039  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 115:279975  
 GI



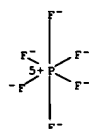
AB Cyclocondensation of ortho esters RC(OEt)3 (R = H, Me, Et, Ph) with N,N'-dialkyl-.alpha.,.omega.-alkanediamines R1NH(CH2)nNHR1 (R1 = H, Me, Et, CHMe2, CMe3; n = 2-4) in the presence of NH4+ X- (X = BF4, PF6) gave cyclic amidinium salts I in 36-99% yields.  
 IT 137581-19-2P 137581-23-8P 137603-23-7P  
 137603-24-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)  
 RN 137581-19-2 CAPLUS  
 CN 1H-Imidazolium, 4,5-dihydro-1,3-bis(1-methylethyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 137581-17-0  
 CMF C9 H19 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
 CRN 16919-18-9

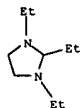
L11 ANSWER 71 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)  
 CMF F6 P  
 CCI CCS



RN 137581-23-8 CAPLUS  
 CN 1H-Imidazolium, 1,2,3-triethyl-4,5-dihydro-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)

CM 1

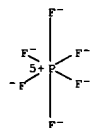
CRN 137581-22-7  
 CMF C9 H19 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

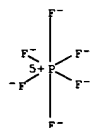
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



RN 137603-23-7 CAPLUS  
 CN 1H-Imidazolium, 4,5-dihydro-1,2,3-trimethyl-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)

L11 ANSWER 71 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

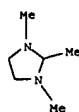
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



L11 ANSWER 71 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CM 1

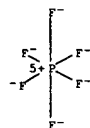
CRN 69894-09-3  
 CMF C6 H13 N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

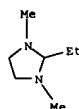
CRN 16919-18-9  
 CMF F6 P  
 CCI CCS



RN 137603-24-8 CAPLUS  
 CN 1H-Imidazolium, 2-ethyl-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)

CM 1

CRN 109153-01-7  
 CMF C7 H15 N2



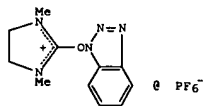
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

L11 ANSWER 72 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:532193 CAPLUS  
 DOCUMENT NUMBER: 113:132193  
 TITLE: Preparation of (benzotriazol-1-yloxy)-1,3-dimethylimidazolium hexafluorophosphate as condensing agent for peptide synthesis  
 INVENTOR(S): Kiso, Yoshiaki; Maeda, Hideo; Otomo, Kikuo; Kijino, Atsushi  
 PATENT ASSIGNEE(S): Hodogaya Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKOKXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02111770	A2	19900424	JP 1988-262874	19881020 <--
PRIORITY APPLN. INFO.:			JP 1988-262874	19881020



AB The title compd. (I) is prepd. Thus, stirring a soln. of 1,3-dimethyl-2-chloroimidazolium chloride in CH2Cl2 with aq. NH4PF6 at 25.degree. for 10 min gave 90.6% 1,3-dimethyl-2-chloroimidazolium hexafluorophosphate, which in suspension with 1-hydroxybenzotriazole in CH2Cl2 was treated dropwise with Et3N at 10.degree. and stirred 3 h at 25.degree. to give 74.2% I. Then, BPP5a was prepd. by the solid-phase method using I from polymer-bound tert-butoxycarbonylated proline.

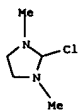
IT 101385-69-7F  
 RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and condensation of, with hydroxybenzotriazole)

RN 101385-69-7 CAPLUS  
 CN 1H-Imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
 (9CI) (CA INDEX NAME)

CM 1

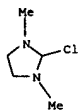
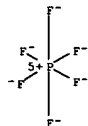
CRN 75126-82-8  
 CMF C5 H10 Cl N2





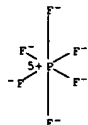
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



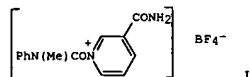
\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



L11 ANSWER 73 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1988:560482 CAPLUS  
DOCUMENT NUMBER: 109:160482  
TITLE: Photographic film supports with hardened subbing layers  
INVENTOR(S): Saïto, Yoichi; Ueda, Eiichi; Tachibana, Noriki  
PATENT ASSIGNEE(S): Konica Co., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
CODEN: JKOXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63096654	A2	19880427	JP 1986-243698	19861013 <--
PRIORITY APPLN. INFO.:			JP 1986-243698	19861013



AB The title photog. polyester film supports are coated on one or both side(s) with an aq. copolymer compn. hardened by using gtoeq.1 carboxyl group-active hardening agents. The copolymer of the coating compn. preferably contains OH or CO2H groups in the side chains. The coating layer improves adhesion of the film support with photog. layers. A corona discharge treated poly(ethylene terephthalate) film was coated with an aq. compn. contg. acrylic acid-Bu acrylate-2-hydroxyethyl methacrylate-styrene copolymer, a surfactant, and a hardening agent I, and coated with a gelatin soln. to give a photog. film support. Radiog. film prepd. by using the film support showed excellent wet- and dry-adhesion of the emulsion layer with the support.

IT 101385-69-7  
RL: USES (Uses)  
(hardening agent, for acrylic polymer subbing layer of photog. films)  
RN 101385-69-7 CAPLUS  
CN 1H-imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2

L11 ANSWER 74 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1988:534975 CAPLUS  
DOCUMENT NUMBER: 109:134975  
TITLE: Stable mixed salts of amino acid monofluorophosphates with sodium chloride and pharmaceuticals for the treatment of degenerative bone diseases containing them  
INVENTOR(S): Senin, Paolo; Chiste, Rolando; Makovec, Francesco; Rovati, Luigi  
PATENT ASSIGNEE(S): Rotta Research Laboratorium S.p.A., Italy  
SOURCE: Ger. Offen., 18 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3716794	A1	19871126	DE 1987-3716794	19870519 <--
DE 3716794	C2	19930218		
FR 2599032	A1	19871127	FR 1987-6974	19870519 <--
FR 2599032	B1	19901207		

PRIORITY APPLN. INFO.: IT 1986-67419 19860520  
AB A process for the stabilization of the title compds. AAuFPO3.cntdot.2NaCl (I; AA = L, D, DL-amino acid; n = 1, 2) is described. L-Glutamine (29.2 g) was suspended in dry Me2CO and mixed at -5.degree. with 10 g H2FPO3 to give 37.07 g (94.57% yield) L-glutamine.cntdot.0.5H2FPO3. The latter was dissolved in a soln. contg. 11.05 g NaCl and 45 mL H2O at 40.degree., then 450 mL Me2CO was added to give I (AA = L-glutamine, n = 2)(II) in 87.9% yield. Rats suffering from immobilization-induced osteoporosis of the shin bone were treated with II in an amt. corresponding to 0.35 mg/kg F, and 12.5 mg/kg Ca for 60 days. The breaking strength of the bone was 6.32 kg, whereas for rats treated with II alone, with CaCl2 alone, or with no treatment it was 5.41, 4.72, and 4.38 kg, resp.; the breaking strength of healthy shin bones in untreated rats was 6.39 kg.  
IT 116420-74-7P  
RL: THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, for treatment of metabolic bone diseases)  
RN 116420-74-7 CAPLUS  
CN L-Histidine, phosphorofluoridate, compd. with sodium chloride (NaCl) (1:1:2) (9CI) (CA INDEX NAME)

CM 1  
CRN 7647-14-5  
CMF Cl Na

Cl=Na

CM 2  
CRN 65887-03-8  
CMF C6 H9 N3 O2 . F H2 O3 P

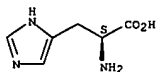
L11 ANSWER 74 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CM 3  
CRN 13537-32-1  
CMF F H2 O3 P



CM 4  
CRN 71-00-1  
CMF C6 H9 N3 O2

Absolute stereochemistry. Rotation (-).

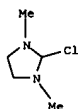


L11 ANSWER 75 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1988:483213 CAPLUS  
DOCUMENT NUMBER: 109:83213  
TITLE: Improved hardening of silver halide photographic material  
INVENTOR(S): Tachibana, Noriiku; Ueda, Eiichi; Kagawa, Nobuaki;  
PATENT ASSIGNEE(S): Ota, Hideo; OI, Ichiro  
SOURCE: Konica Co., Japan  
Jpn. Kokai Tokkyo Koho, 28 pp.  
CODEN: JKOKAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62286034	A2	19871211	JP 1986-129880	19860604 <--
JP 2532842	B2	19960911		

PRIORITY APPLN. INFO.: JP 1986-129880 19860604  
AB In order to eliminate the undesirable post hardening of a Ag halide photog. material comprising .gtoreq.1 Ag halide emulsion layer on a support and .gtoreq.1 nonphotosensitive layer on the other side, .gtoreq.1 of the nonphotosensitive layers is hardened by a polymer film-hardening agent and .gtoreq.1 of the Ag halide emulsion layers or .gtoreq.1 of the Ag halide emulsion layers and .gtoreq.1 of the nonphotosensitive layers are hardened by a carboxyl-activating low-mol.-wt. film-hardening agent. The Ag halide photog. material has improved scratch resistance and film hardness.  
IT 101385-69-7  
RL: USES (Uses)  
(photog. material hardening agent)  
RN 101385-69-7 CAPLUS  
CN 1H-imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-)  
(9CI) (CA INDEX NAME)

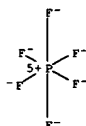
CM 1  
CRN 75126-82-8  
CMF C5 H10 Cl N2



\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS

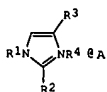
L11 ANSWER 75 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 76 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1988:86382 CAPLUS  
DOCUMENT NUMBER: 108:86382  
TITLE: Fluorocomplex acid salts of imidazole or its derivatives in aprotic solvents as electrolytes for electrolytic capacitors  
INVENTOR(S): Shinozaki, Fumihiko; Yokoyama, Yutaka  
PATENT ASSIGNEE(S): Nippon Chemi-Con Corp., Japan  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

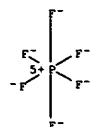
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 238062	A1	19870923	EP 1987-103978	19870318 <--
EP 238062	B1	19910717		
JP 62219908	A2	19870928	JP 1986-62792	19860320 <--
JP 04024851	B4	19920428		
US 4762631	A	19880809	US 1987-26746	19870317 <--
			JP 1986-62792	19860320

PRIORITY APPLN. INFO.: JP 1986-62792 19860320  
GI



AB The electrolyte is a salt (I), where R1 = H or CH2CHCN; R2 = H, C1-8 alkyl, Ph, or benzyl; R3,R4 = H or C1-8 alkyl; and A = fluorocomplex acid (esp. HBF4 or HPF6), in an aprotic solvent. A 10% soln. of imidazole tetrafluoroborate in N-methylformamide had cond. of 13.2 mS/cm and capacitance, dielec. loss, and leakage current of 179 .mu.F, 0.063, and 0.61 .mu.A, resp., initially and 170, 0.076, and 0.56, resp., after a load test at 110.degree. for 1000 h. A ref. electrolyte contg. ethylene glycol 78, H2O 10, and ammonium adipate 12 wt.% had values of 6.7 mS/cm, 176 .mu.F, 0.085, 0.72 .mu.A, 150, 0.129, and 0.7, resp.  
IT 112725-83-4 112725-84-5  
RL: USES (Uses)  
(Capacitor electrolyte from, in aprotic solvent)  
RN 112725-83-4 CAPLUS  
CN Phosphate(1-), hexafluoro-, hydrogen, compd. with 1H-imidazole (1:1)  
(9CI)  
(CA INDEX NAME)

CM 1  
CRN 16940-81-1  
CMF F6 P . H  
CCI CCS

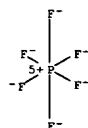
● H<sup>+</sup>

CM 2

CRN 288-32-4  
CMF C3 H4 N2

RN 112725-84-5 CAPLUS  
CN Phosphate(1-), hexafluoro-, hydrogen, compd. with 2-methyl-1H-imidazole (1:1) (SCI) (CA INDEX NAME)

CM 1

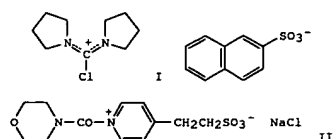
CRN 16940-81-1  
CMF F6 P . H  
CCI CCS● H<sup>+</sup>

CM 2

ACCESSION NUMBER: 1986:159540 CAPLUS  
DOCUMENT NUMBER: 104:159540  
TITLE: Hardening method for gelatin  
INVENTOR(S): Okamura, Hisashi; Kawamoto, Hiroshi; Shiraishi, Hisashi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 62 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 162308	A2	19851127		
EP 162308	A3	19880831	EP 1985-104867	19850422 <--
EP 162308	B1	19900801		
R: DE, GB				
JP 60225148	A2	19851109	JP 1984-82215	19840423 <--
JP 05040299	B4	19930617		
US 4673632	A	19870616	US 1985-726441	19850423 <--
			JP 1984-82215	19840423

PRIORITY APPLN. INFO.:  
GI



AB A hardening agent which has a high H<sub>2</sub>O soly. and can be added to an aq. photog. emulsion without an aid of an org. solvents has a formula N(R<sub>1</sub>C)(R<sub>2</sub>R<sub>3</sub>)Y- (R-R<sub>3</sub> = alkyl, alkenyl R, R<sub>1</sub> and R<sub>2</sub>, R<sub>3</sub> may combine to form a ring or .gtoreq.3 of R-R<sub>3</sub> can combine with each other to form a condensed ring; X = a group which is released during reaction with a nucleophilic reagent; Y- = an anion which can combine with any of X or R-R<sub>3</sub> (or when .gtoreq.2 of R-R<sub>3</sub> combine with each other to form a ring, Y-may bond with a ring) to form an intramol. salt. Thus, a cellulose triacetate support was coated with a compn. contg. aq. 7% gelatin and I

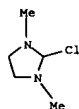
20 mmol/100 g of gelatin to give 8 .mu.m (dry) thickness, and kept for 2 h at 50% relative humidity to show a crosslinking coeff. .delta. {(the crosslinked unit no.)/(wt. mean mol. wt. of gelatin before crosslinking)} of 6.6 vs. 1.2 for a control with a comparison compd. II. After 7 days .delta. equalled 7 vs. 6.4 for a control.

IT 101385-69-7P

RL: PREP (Preparation)  
(prepn. of, as hardening agent for photog. gelatin)  
RN 101385-69-7 CAPLUS  
CN 1H-imidazolium, 2-chloro-4,5-dihydro-1,3-dimethyl-, hexafluorophosphate(1-

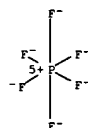
CRN 693-98-1  
CMF C4 H6 N2

CM 1

CRN 75126-82-8  
CMF C5 H10 Cl N2

\*\*\* FRAGMENT DIAGRAM IS INCOMPLETE \*\*\*

CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS

L11 ANSWER 78 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1978:191465 CAPLUS  
DOCUMENT NUMBER: 88:191465  
TITLE: Amino acid derivatives  
INVENTOR(S): Saari, Albert L.; Anderson, Ray H.  
PATENT ASSIGNEE(S): General Mills, Inc., USA  
SOURCE: U.S., 7 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4064138	A	19771220	US 1975-631285	19751112 <--

PRIORITY APPLN. INFO.: US 1975-631285 19751112  
AB Monofluorophosphate, hydrofluoride phosphate, hydrofluoride monofluorophosphate, di-monofluorophosphate, and phosphate monofluorophosphate deriva. of lysine, hydroxyllysine, arginine, histidine, or ornithine and their alkali metal salts, useful as cariostatics, were prep'd. Thus, lysine-HCl was passed through an Amberlite IRA 410 (OH-form) column and the free lysine was treated with 50% aq. HF and KHZPO4 to give lysine hydrofluoride phosphate monopotassium salt (I). I reduced caries in rats by 24%.

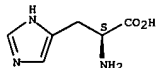
IT 65887-03-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)  
RN 65887-03-8 CAPLUS  
CN L-Histidine, phosphorofluoridate (1:1) (9CI) (CA INDEX NAME)

CH 1  
CRN 13537-32-1  
CMF F H2 O3 P



CH 2  
CRN 71-00-1  
CMF C6 H9 N3 O2

Absolute stereochemistry. Rotation (-).

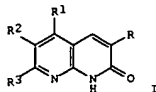


L11 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1977:106555 CAPLUS  
DOCUMENT NUMBER: 86:106555  
TITLE: 1,8-Naphthyridine compounds  
INVENTOR(S): Rooney, Clarence S.; Williams, Haydn Windsor R.; Wasson, Burton K.  
PATENT ASSIGNEE(S): Merck and Co., Inc., USA  
SOURCE: U.S., 11 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3993656	A	19761123	US 1975-551565	19750220 <--

PRIORITY APPLN. INFO.: US 1973-341420 19730315  
US 1974-525235 19741119

GI



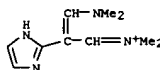
AB The naphthyridines I (R = H, NH2, NO2, Me2N, 2-pyridyl; R1 = H, NH2, 4-pyridyl, ACNH; R2 = R3 = Me, F3C; R1 = R3 = F3C, R2 = H) were prep'd. Thus, EtOCC(=NH)CH2CO2Et was treated with MeCOCH(NHAc)COMe followed by H2NNH2.H2O and the 2-amino-5-acetamido-4,6-dimethylnicotinic acid hydrazide treated with PhSO2Cl followed by Na2CO3 to give 2-amino-5-acetamido-4,6-dimethylnicotinaldehyde, which was treated with NaH and triethyl phosphonoacetate and the 3-(2-amino-5-acetamido-4,6-dimethyl-3-pyridyl)acrylate cyclized with HCl to give I (R = H, R2 = H2N, R1 = R3 = Me). I had bronchodilating and antihypertensive activities (no data).

IT 51076-58-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and hydrolysis of)  
RN 51076-58-5 CAPLUS  
CN Methanaminium,  
N-[3-(dimethylamino)-2-(1H-imidazol-2-yl)-2-propenylidene]-  
N-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

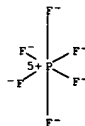
CH 1  
CRN 51076-57-4  
CMF C10 H17 N4

L11 ANSWER 78 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

L11 ANSWER 79 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

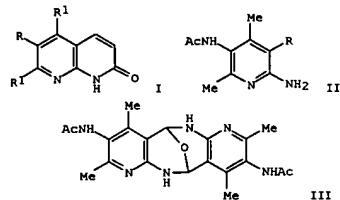


CH 2  
CRN 16919-18-9  
CMF F6 P  
CCI CCS



L11 ANSWER 80 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1977:5345 CAPLUS  
DOCUMENT NUMBER: 86:5345  
TITLE: 1,8-Naphthyridines. Part III. Synthesis of some 6-substituted-1,8-naphthyridin-2(1H)-ones  
AUTHOR(S): Eichler, Eva; Rooney, Clarence S.; Williams, Haydn Windsor R.  
CORPORATE SOURCE: Med. Chem. Dep., Merck Frost Lab., Pointe Claire/Dorval, QC, Can.  
SOURCE: Journal of Heterocyclic Chemistry (1976), 13(4), 841-4  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB The naphthyridinones I (R = 4-pyridyl, 2-imidazolyl; R1 = H) were prepd. by cyclization of 2,6-diaminopyridine with RCH(CHO)2 followed by deamination-hydroxylation of the 2-aminonaphthyridines. MeCONHCH(COMe)2 was cyclized with EtO2C(:NH)OEt and the pyridine II (R = EtO2C) treated with H2NNH2 and PhSO3H to give II (RPhSO2NNHCO) which underwent McFadyen Stevens reaction to give II (R = CHO) and a small amt. of the dimer III. II (R = CHO) underwent Wittig reaction with EtO2CCH:PhEt3 to give II (R = CH:CHCO2Et), which was cyclized to give I (R = NH2, R1 = Me).

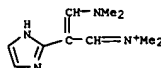
IT 51076-58-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction with sodium hydroxide)

RN 51076-58-5 CAPLUS  
CN Methanaminium,  
N-[3-(dimethylamino)-2-(1H-imidazol-2-yl)-2-propenylidene]-  
N-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

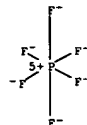
CRN 51076-57-4  
CMF C10 H17 N4

L11 ANSWER 80 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



CM 2

CRN 16919-18-9  
CMF F6 P  
CCI CCS



L11 ANSWER 81 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1974:120895 CAPLUS  
DOCUMENT NUMBER: 80:120895  
TITLE: 1,8-Naphthyridin-2-(1H)-one derivatives  
INVENTOR(S): Williams, Haydn W. P.; Rooney, Clarence S.; Wasson, Burton K.  
PATENT ASSIGNEE(S): Merck Sharp and Dohme (I.A.) Corp.  
SOURCE: Fr. Demande, 32 pp.  
CODEN: PRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2183753	A1	19731221	FR 1973-15863	19730503 <--
FR 2183753	B1	19760702		
CA 988522	A1	19760504	CA 1972-141473	19720505 <--
NL 7305482	A	19731107	NL 1973-5482	19730418 <--
GB 1397869	A	19750618	GB 1973-20473	19730430 <--
JP 49047389	A2	19740508	JP 1973-47645	19730501 <--
CH 592661	A	19771031	CH 1973-6397	19730504 <--
			CA 1972-141473	19720505

PRIORITY APPLN. INFO.:  
GI For diagram(s), see printed CA issue.  
AB Bronchodilator and antihypertensive naphthyridines I (R = NH2, NHAc, NHCHMe2, NMe2, 2-pyridyl, 3-pyridyl, 4-pyridyl, R1 = Me; R2 = H; R = H, R1 = Me, R2 = NH2; R = CO2Et, CO2H, R1 = Me, R2 = NHAc; R = R1 = H, R2 = 4-pyridyl, 2-imidazolyl; R = 2-pyridyl, 4-pyridyl, R1 = CF3, R2 = H) were prepd. Thus, (MeCO)2CHNHAc was treated with EtO2CCH2C(:NH)OEt to give the

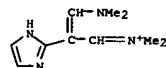
nicotinate II (R3 = CO2Et), which was converted to II (R3 = CH:CHCO2Et) via II (R3 = CONHNH2, CONHNH2SO2Ph, CHO), and cyclized with HCl to I (R = H, R1 = Me, R2 = NH2).

IT 51076-58-5P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 51076-58-5 CAPLUS  
CN Methanaminium,  
N-[3-(dimethylamino)-2-(1H-imidazol-2-yl)-2-propenylidene]-  
N-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

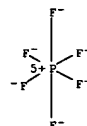
CRN 51076-57-4  
CMF C10 H17 N4



CM 2

CRN 16919-18-9  
CMF F6 P

L11 ANSWER 81 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)



L11 ANSWER 82 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1974:37087 CAPLUS  
DOCUMENT NUMBER: 80:37087  
TITLE: 1,8-Naphthyridin-2(1H)-ones  
INVENTOR(S): Williams, Haydn Windsor; Rooney, Clarence S.; Wasson, Burton K.  
PATENT ASSIGNEE(S): Merck Sharp and Dohme (I.A.) Corp.  
SOURCE: Ger. Offen., 32 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

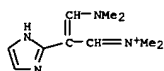
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2322350	A1	19731122	DE 1973-2322350	19730503 <--
CA 988522	A1	19760504	CA 1972-141473	19720505 <--
NL 7305482	A	19731107	NL 1973-5482	19730418 <--
GB 1397869	A	19750610	GB 1973-20473	19730430 <--
JP 49047389	A2	19740508	JP 1973-47645	19730501 <--
CH 592661	A	19771031	CH 1973-6397	19730504 <--

PRIORITY APPLN. INFO.: CA 1972-141473 19720505  
GI For diagram(s), see printed CA Issue.  
AB Fourteen naphthyridinones (I; R = H, NH2, NMe2, NHCHMe2, NHAc, 2-, 3-, or 4-pyridyl, CO2Et, or CO2H; R1 = H, Me, or CF3; R2 = H, NH2, NHAc, 4-pyridyl, or 2-imidazolyl) and (or) their hydrochlorides useful as antihypertensives and bronchodilators, were prepd. Thus, the pyridines

II reacted a) with (EtO)2P(O)CH2CO2Et to give 90.5% III, followed by cyclization in 6N HCl to give 79% I (R = H), b) with O2NCH2CO2Et to give 44% I (R = NO2), followed by hydrogenation and (or) other reactions, to give I (R = (substituted) amino), c) with RCH2CO2Et or RCH2CO2Me to give .litoreq. 55% I, or d) with CH2(CO2Et)2 to give 87% I (R = CO2Et), optionally followed by hydrolysis. IV reacted with RCH2CO2Me to give 30% I. IV was also used in the prepn. of II. 2,6-Diaminopyridine reacted with OCHCHRCHO to give in 6-position substituted 2-amino-1,8-naphthyridines, which on treatment with NaNO2 in F3CCO2H gave I (R1 = H).  
IT 51076-58-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)  
RN 51076-58-5 CAPLUS  
CN Methanaminium,  
N-[3-(dimethylamino)-2-(1H-imidazol-2-yl)-2-propenylidene]-  
N-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

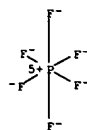
CM 1  
CRN 51076-57-4  
CMF C10 H17 N4



CM 2

L11 ANSWER 82 OF 82 CAPLUS COPYRIGHT 2003 ACS on STN (Continued)

CRN 16919-18-9  
CMF F6 P  
CCI CCS



=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	374.93	690.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-53.38	-53.38

STN INTERNATIONAL LOGOFF AT 11:44:37 ON 08 DEC 2003